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CONTENTS

ORIGINAL ARTICLES		PAGE	PAGE
Address of the Dean at the Opening of the Medical School—University of Michigan. Hugh Cabot, M. D.	431	Sole Print Identification of the New Born. E. L. Robinson, A. B., M. D.	451
Is the Mortality of Appendicitis Increasing? H. E. Randall, M. D., F. A. C. S.	435	Artificial Pneumothorax in Acute Tuberculous Pneumonia, Acute Pulmonary Abscess and Pulmonary Hemorrhage. Collins H. Johnston, B. A., M. D.	453
Transduodenal Biliary Drainage a Valuable Diagnostic and Therapeutic Measure. Charles F. Stewart, M. D., F. A. C. S.	438	Abdominal Pain Relieved by the Removal of an Apparently Healthy Appendix. B. Hjalmar Larson, M. D.	456
Problems in the Care of Industrial Injuries of the Eye. Howell L. Begle, M. D.	443	In the Final Analysis, Is Lane's Kink Really a Trouble Maker, or Has It a Life-saving Function? Henry J. Vandenberg, M. D., F. A. C. S.	460
Treatment of Sub-Acute and Chronic Otitis Media With the Use of the X-Ray. Robert Beattie, M. D.	449	An Improved Gastro-Duodenal Tube. Bruce C. Lockwood, M. D.	460

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CONTENTS—Continued

	PAGE
EDITORIAL	
Historical Details of Our Society	462
Armistice Day—Two Minutes	464
Diagnostic Clinics	465
Gastric and Duodenal Ulcers	467
Appendicitis	468
"British Health Talk"	469
Surgical Jazz	469
"Advice From the Jack Pines"	472
Jackson County Society Clinic	473
Editorial Comments	474

DEATHS

Dr. Theodore McGraw	476
Dr. S. John Fraser	481
Dr. J. D. Riker	481

STATE AND SOCIETY NEWS

Wayne County	481
Calhoun County	484
Bay County	484
Saginaw County	485
Genesee County	485
Tuscola County	485
State News Notes	485
Correspondence	489

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OF THE

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Vol. XX

GRAND RAPIDS, MICHIGAN, NOVEMBER, 1921

No. 11

Original Articles

ADDRESS OF THE DEAN AT THE OPENING OF THE MEDICAL SCHOOL—UNIVERSITY OF MICHIGAN*

HUGH CABOT, M. D.
ANN ARBOR, MICH.

"I find myself this morning in a difficult position. Difficult for two reasons, firstly, because I am taking up the reins laid down by a great man and secondly, because this is a time when many problems in the teaching of medicine press for solution. There is perhaps more change in the air than is ordinarily the case. In regard to the latter difficulty, one should perhaps not complain since it adds zest and interest to life and we may be sure that no monotony or drabness will surround the next few years of medical teaching. In regard to my first difficulty, the case is far otherwise. To classify Dr. Vaughan as a great man is no idle compliment and the doubtful have merely to look at the monument he has left here for their answer. Many would perhaps be glad to be judged by their intensions, but in the long run, the world will probably judge us by our results and it is reasonable that we should judge Dr. Vaughan by his results. He came here in the early days of organized medical teaching in this country. More than thirty years ago, he became the executive officer of this Medical School and it is strictly accurate to say that this school is his monument. Its policies have been worked out, its faculty has been brought together and stand as the result of his extraordinary executive capacity.

In the days when it became his duty to decide, it required not only fore-sight in decision but unusual boldness to undertake the building up of a great medical school without the facilities of a large city. No-

such schools existed or to the best of my knowledge ever had existed, and the soundness of the proposition that a medical school giving complete instruction in all branches, both preclinical and clinical, could be built up in a city of less than 10,000 inhabitants might reasonably be doubted. As a relatively new comer here, I can without bias estimate the position of this school in relation to the other schools of the country and I can say without hesitation that it stands in first rank, that it has always stood high in the character of its pre-clinical instruction and that, with the upbuilding of the University Hospital, it has stood high in the character of its clinical instruction. The decision made under his administration to retain the clinical teaching in Ann Arbor rather than to allow it to be transferred to Detroit is evidence of great wisdom and great fore-sight. Today discussions concerning the possibility of building up clinical departments in small cities are being answered the country over by pointing to the example of the University of Michigan. It means that the policy laid down by Dr. Vaughan has been a convincing success.

The character and standing of this faculty must be a lasting monument to him as a judge of men. All obstacles which have been here overcome, particularly in regard to the teaching of clinical branches are a lasting monument to his judgment and prevision. We may properly regard him as one of the greatest medical educators that this country has ever produced and we may fairly doubt whether we shall be able to direct the policy of this school with equal judgment.

It is however proper at this time that I should state as clearly and as frankly as possible the fundamental objects which I believe to be comprehended under the term "policy" of this school. A medical school today may be thought of as having three teaching functions and presenting three ideals or facets to the world:

1. The teaching of undergraduates.

*Delivered Sept. 28, 1921.

2. The teaching of graduate physicians and the advancement of the boundaries of medical knowledge.

3. The teaching of the public in matters of public health and health policy and assisting in working out the relation of physicians and hospitals to the people of the state.

POLICY IN REGARD TO TEACHING OF UNDER-GRADUATES

I may say at once that unless I gravely mistake the temper of this faculty no fundamental change is contemplated. Clearly the most debatable and debated question is that of so called "full time" instruction in the clinical branches. Here no change of policy is contemplated since it is more than two years since this faculty voted its approval of the theory involved. This is not the time nor the place to re-state the argument concerning full time teaching but it is proper that our position should be made clear at the outset.

The theory of full time teaching in the clinical branches is relatively simple and concerning it there is little difference of opinion. That it is a desirable method, most will agree and this agreement has come from the clear demonstration of the unsatisfactory character of part time teaching in these branches. It will be generally admitted that part time teaching involves a dual allegiance, one to the university and one to the individual himself and this divided allegiance has resulted in teaching somewhat less than satisfactory. That the difficulty is widely recognized and generally admitted is clear since most of the great medical schools in the country are experimenting with such full time teaching in some form.

But, it is not over the theory of full time instruction but over the practice that doubt and difficulty has arisen. It is undoubtedly true that today there is no well demonstrated plan of full time teaching in clinical branches which is regarded as satisfactory by a large number of those competent to an opinion. Discussions of the matter have been considerably impeded by the failure to draw a distinction between the application of this principle to medical schools situated in large cities and its application to those situated, as we are, in small cities. But the difference is very real and cannot be omitted from any discussion without seriously compromising the soundness of the conclusion. The employment of part time teachers for all the clinical branches is a relatively simple matter and comparatively more satisfactory in those schools situated

in large cities with quantities of clinical material at hand. If, however, part time teaching has been unsatisfactory in the group just referred to, it has been far more unsatisfactory here. The teacher must here stretch himself thinner and thinner over the field he is required to cover and may in the end fail to achieve success either as a teacher or as a practitioner of medicine. Thus, clearly the problem is one of paramount importance and we must bring to it our best judgment applied always with patience and respect.

It is my own well considered opinion that full time instruction in clinical subjects will not achieve its best results if the character of the instruction is essentially altered from that given in the past by the schools employing part time service. If as the result of full time teaching, we are to see it fall into the hands of those who are essentially scientists, unfamiliar with the art of medicine, I shall be unwilling to admit that we are doing our full duty to the student. We must, I believe, continue to attract to these teaching positions men of experience both in the science and in the art of medicine. If this premise be admitted, it follows necessarily that the most difficult question is one of financing. We shall require men who have achieved distinction and are able to command relatively large incomes. That the Medical School can properly afford to offer them salaries equal to their earning capacity as practitioners, I do not believe. But it must be prepared to offer them something approaching their market value or in the long run they will not come.

As I have already intimated there is no general agreement as to how the principle of full time teaching shall be put into practice. Many methods are being tried. Some of them are far reaching and some of them are very moderate and hesitating. The fact of the matter is that there is no body of experience entitling anyone to pass final judgment in this matter. All are experimenting and the more methods that are tried in good faith, the sooner we shall be able to accumulate a body of fact entitling to an opinion.

But if we are to experiment we must try the method in a reasonable way such that our conclusions will be entitled to weight. Enough departments must be put on full time to allow drawing of sound inferences and at the same time the school must not so far commit itself as to lose its flexibility and be unable to adapt itself to reasonable changing conditions. It would indeed be

a bold man who would assert that he was sure of the best method to utilize "full time" in the clinical branches. In working out this experiment on the basis which I have stated, it is essential that the university should respect its commitments and no agreements expressed or implied can properly be disregarded. Furthermore, we must at all time keep our minds open and preserve a decent respect for the opinions of others.

On the other hand, however, this experiment is entitled to an honest trial. Here we have elected a method whereby the whole weight of financing this work does not fall upon the tax payer but is borne in part by the legitimate income of the hospital. It is my judgment that by distributing the burden in this way, it will not bear too heavily upon the school and is far more likely to succeed than any other yet attempted method.

I do not need to remind you that the plan has been much criticized but most of the critics have not faced the problem and offered no solution unless it be that we should ask the tax payer to assume the whole burden which suggests that they really desire failure and regard this as a most convenient method of getting it. There has been much loose talk about the state's interference in the practice of medicine, apparently in entire disregard of the fact that the state has been gradually insinuating itself into the practice of medicine for two generations. It has been alleged that the competition thus introduced is unfair when as it seems to me, it is far less so than under the system of part time when with all the advantages which accrue from a university connection, the clinical staff still competes with its less fortunate brothers. We have even been accused of attempting to commercialize it. The utmost limits of commercialized medicine were reached in the days, happily now passing, when some medical schools with a faculty of purely part time teachers were nothing more or less than feeders for the consulting rooms of the faculty. This is commercialized medicine if you please. Our proposition is precisely the reverse. The method suggested for the conduct of the University Hospital has been criticised on the ground that it would deprive physicians of their patients and ruin their practice. If one looks carefully at this proposition, it at once appears to have no basis in fact. If half of the physicians of the State of Michigan were to send to the University Hospital one patient a year, we should be unable to cope with the number. In these

discussions, it has, I think, been overlooked that this university is an institution of the State and that it must be conducted with due and proper regard for that fact. Beyond question, the physicians are entitled to consideration but so also are the sick and the tax payer. We are not prepared to admit that the physician is entitled to exclusive consideration in the working out of this problem, but we propose that he shall have every consideration and every respect. We are prepared to consider any suggestion and any criticism which is constructive and which is an honest attempt to aid in the solution of the problem. We are not hide bound in our opinions and do not say that the method here adopted is the only one or the best one.

THE TEACHING OF PHYSICIANS AND ADVANCEMENT OF THE BOUNDARIES OF KNOWLEDGE

It is clearly one of the great duties of the Medical School to be prepared to assist physicians not only in the management of any particular patient, but in the general management of disease. One might, I think, properly regard the Medical School as a reference library in the diagnosis and treatment of disease. We should be prepared to put at the disposal of physicians the knowledge here accumulated and advise them upon those methods which in our opinion are sound and those which are not sound. Only in this way will the Medical School discharge its duties to the public and maintain a sound relation to the great body of those who must care for the sick of the country.

But if we served no other purpose than to teach our students wisely and to present the problem of modern medicine skillfully to our brother physicians, we should lose sight of one of the great functions which is properly to be expected of us, namely research. Research requires for its proper prosecution a highly special environment and it is rare that the physician with a private practice can at the same time carry on far-reaching investigations of medical problems. It is the duty of the Medical School to see to it that an atmosphere congenial to research exists and that a reasonable proportion of its funds are at the disposal of those who have both the ability and the desire to work in this field. The University will do well to make congenial abiding places for those with investigative minds though having perhaps little or no capacity to achieve distinction in the turmoil of the world. Such men allowed to grow up under the proper surroundings may well con-

tribute more to the sum of human knowledge and to the alleviation of human ills than many of their more practical minded brothers.

INSTRUCTION OF THE PUBLIC ON QUESTIONS PERTAINING TO PUBLIC HEALTH

Though it may be a somewhat novel conception, it seems to me clear that the medical school, particularly of a State University must do its share in the work of disseminating sound opinion on medical questions. There is today a large and growing group of agencies part of whose function is the dissemination of knowledge concerning public health. With these agencies and perhaps particularly with the public health officers and public health associations, it is clearly the business of the University through its medical department to cooperate to the fullest extent. If we are prepared to admit that there can be no sound public health without as an antecedent, a sound public opinion then here is a great work for the university and one to which it must be prepared to give considerable time. Insofar as it has officers competent to speak with authority and trained in the business of transmitting information to the less informed, these officers should be at the disposal of the state and public health agencies to assist in the great campaign for building up and strengthening of public health.

As a part of this function and one which at the moment is of great importance is the dissemination of knowledge in regard to the soundest and best relationship between the medical profession and the public. It appears to be true that at the present time this subject is attracting more attention than at any other time, certainly for many years. With the growing complication of the field of medicine has arisen difficulties in adjustment between the profession and the public. The expense of the practice of medicine to the physician has enormously increased and has in more or less direct ratio increased the expense to the patient. This has given rise to much discussion. That the public has a real case in its desire to obtain medical care at a reasonable price is true. But it is even more true that the medical profession is entitled to great consideration and should properly be regarded as the best witness concerning the difficulties surrounding any new adjustment. It is not necessary here to go into the suggested remedies which have included various forms of compulsory health insurance and various remedies classified under the very vague phrase of "state medicine." I desire

only to point out that it is my opinion that the State Medical School should be prepared to bear its part in this discussion and I desire to take this opportunity of making clear the position which this school will take in the present discussion. Any proposition for the amelioration of real ills in the present adjustment which leaves out of account or fails to give great importance to the maintenance of the present relationship between the physician and the patient is in my judgment doomed to failure in this democracy. It is the essence of the American spirit that it desires freedom of choice and though such choice may not always be wisely made, any attempt to curtail such choice will meet irresistible opposition and will fail. Furthermore it appears to me clear that no proposition looking to change can be successful which will result in the deterioration of the standing of the medical profession in the community. The standing of the physician in the community has always been a high one and he has been looked to as an almost public official whose concerns were less personal and more public than those of most of his brethren. Now, any proposition to change present conditions which will importantly alter this relation, which will make the medical profession one of lesser dignity and lesser importance, though it might temporarily appear to remedy the ills, would in the end defeat its own purpose and have a disastrous effect upon the public health. Unless the medical profession be encouraged to continue in the future as in the past and unless the individual physician continue to regard himself as having duties to others far greater than to himself, advancement in medicine will be less rapid, our ability to deal with disease will improve less certainly and we may well see our civilization fall because of the failure to cope with the diseases with which it is constantly menaced. I think I may safely say that this faculty will be found upon the side of the medical profession, that it will always sympathize with the demands of the public for improved medical service but that it will cast the weight of its influence in favor of those changes which maintain the dignity of the profession and oppose those which reduce the profession to hirelings of the state, of the community or of the corporation. I take your time to make these statements because there has, I think, been misapprehension in the minds of the physicians of this state as to the views held by this faculty. This misapprehension I desire to correct to

the end that the most cordial relation may exist between this faculty and the medical profession.

IS THE MORTALITY OF APPENDICITIS INCREASING?

H. E. RANDALL, M. D., F. A. C. S.
FLINT, MICH.

It is diseases and disturbances of the gastro-intestinal tract that gives the general surgeon the great part of his work. Affections of the pituitary gland, the tonsils, thyroid gland, stomach, duodenum, gall bladder, appendix, diverticuli of the bowels, and diseases of the rectum. The new tract and its offshoots devised in the process of evolution after the abandonment of the old alimentary tract which formerly passed through the brain and the spinal cord, furnish the majority of surgical operations performed on the human race.

Most of the life saving operations that are done are called for by inflammation, perforation, neoplasm, mechanical derangements of the gastro-intestinal tract. These are penalties and risks that the higher animal pays for grade in the evolutionary scale.

The appendix vermi formis is one of the vestigial organs which nature has not yet adjusted or eliminated and mankind still carries an unused and useless organ which may finally be eliminated.

That the mortality of appendicitis should be increasing faster than the rate of population has lead me to make some inquiries and investigations which I wish to present to you. This fact was first drawn to my attention by a former editor of Bay City. I did not believe this true at the time, but Mr. Wm. F. Petrie, in charge of the vital statistics of this state, gave me the following figures:

Per 100,000 population.			
1913.....259	8.	1916.....521	16.8
1914.....411	13.7	1917.....493	15.7
1915.....464	15.3	1918.....477	14.98

This shows an increase up to 1916 and the last two years a slight decrease. In 1916 the deaths from appendicitis were double those of 1913.

The statistics of England while showing a lower mortality at the same time has also doubled.

1901.....38	per million	1911.....75	per million
1902.....45	" "	1913.....68	" "
1903.....52	" "	1915.....67	" "
1905.....57	" "	1917.....67	" "
1910.....66	" "	1918.....72	" "

The death rate in Michigan is twice that of England.

The death rate in Holland from 1901 to

1904 was 88.8 per million. In Denmark 12 per million in 1914. Sweden in 1905, 16 per million. In Spain it is rare. Rendle Short says that the largest consultant in Madrid just before 1914 had but 4 cases per year.

The colored race rarely has appendicitis. At Johns Hopkins there were 12 whites to 1 black with 1-5 admittance colored. In my own practice I have seen but two cases in colored people. Dr. W. T. Henderson of Mobile, Alabama, whom many of you know, replied to my inquiry that he estimated there were 40 cases in the whites to one in the black race, the population in Mobile being about equal.

Appendicitis in Asia and Africa is reported but rarely in the natives, but more frequently in the foreigners, yet diarrhea and intestinal diseases are of frequent occurrence. About 20 years ago I wrote an article in which I stated that appendicitis probably followed intestinal infections.

It would seem from Short's article in the British Journal of Surgery that U. S., Great Britain, probably Denmark and Sweden, the incidence of the disease is high. In Spain, Greece, Italy, it is low.

Animals in a wild state rarely have appendicitis. Veterinarians assure me that it is a common occurrence in domesticated animals. It is quite common in apes in captivity.

In Asia, Africa and Polynesia the disease is rare except where natives take to European methods or food.

In 15,000 soldiers seen in our Base Hospital No. 36, there were 156 cases of appendicitis, of which 97 were acute and 59 chronic. A peculiar feature among this service was that there wasn't a single case among civilians on war rations although we drew from a large district.

Not to make this paper too long and tiresome, I wish to give you the following conclusions:

1. Appendicitis is more prevalent in America, Great Britain, Denmark and Sweden, who are large consumers of meats and preserved foods, but there was no falling off during the war due to shortage of meat. The Esquimaux has the disease but rarely.

2. It has been suggested that the vitamins in vegetables and grains as in the Africans and the Asiatics or the poorer fed nations may account for their immunity, notwithstanding their liability to diarrhea.

3. LaGrippe, local infections of teeth, tonsils, nasal accessory sinuses, tonsillitis,

seem to me to have no bearing on the prevalence of appendicitis.

4. Appendicitis is increasing in the more civilized nations of the world.

5. The greatest mortality is between the ages of 5 and 15.

6. The state of Michigan is losing approximately 500 of its citizens each year from the disease, or as large as the attendance at this meeting.

7. In endeavoring to reduce the mortality there must be more prompt diagnosis and operations.

8. Inexperienced operators consume too much time in searching for the appendix with too much handling and exposure of the intestines.

9. The giving of purgatives before and after operations undoubtedly increase the mortality.

10. Sudden, acute abdominal pain in children usually means appendicitis.

11. The importance of diagnosing appendicitis from rigidity of the external oblique in the absence of rigidity of the right rectus muscle will further reduce the mortality of a disease in which the public and doctors all agree is a condition requiring prompt surgical intervention.

My own experience is that family physicians who recognize that rigidity of the external oblique in appendicitis even in the absence of rigidity of the right rectus will have a lower mortality than those who fail to recognize its importance.

DISCUSSION

DR. B. M. DAVEY, Lansing: Regarding the statistics the doctor has given I know very little. That appendicitis is operated by everybody's doing it would be one of the reasons, I think, responsible for the high mortality. Perhaps another reason is the late date at which our cases are operated, and thirdly, improper drainage in late cases. We should have more efficient drainage particularly in cases of a low appendix or the so-called subcaecal type, and in the cases we get late where the general peritoneum is becoming involved. In all cases operated after the first 24 or 36 hours the drainage tube should be left in for a greater length of time.

DR. R. J. HUTCHINSON, Grand Rapids: I, like Dr. Randall, have been called upon this last year to give this subject more attention than I have ever before. The fact that everybody is still doing it may account for two perforated cases being brought to me within the same week. I believe if the statistics were studied we would find that the greater mortality comes in the cases coming from the country. I have often thought of this and I think it is readily explained by the fact that most country physicians are quite busy, especially in time of epidemics, and that the laity do not call the physician until they think the case is going to be serious.

As we all know, in appendicitis if you wait 24 hours you have lost the golden opportunity for an operation without suppuration. In the first place, a lot of these cases are obscure and it is often impossible for the diagnostician to make a diagnosis on the first visit. Perhaps the doctor does not get around to see the case for two days after he has been called and when he does he finds a large ab-

cess and a peritonitis. The doctors having these cases want to get the patient off to the hospital and off their hands and they do not consider the surgeon in the matter. I think part of the trouble is that the general practitioner cannot help it; his work is so great and he has so large a territory to cover that it is impossible for him to attend to his patients properly.

Again, I recall when I went to Grand Rapids I think I could safely count all the operators we had there on one hand, especially the men who were doing much work. Today I doubt if you counted them by the hairs of your head you would have them all. It is a frequent remark to hear a man say, "Why all the abdominal surgery I do is to remove an appendix or something like that." Where in surgery do we find more complicated cases and more cases that test your skill than in cases of acute appendicitis? I do not wish to knock any man who is trying to become an operator, but I think he might better pay for his instruction in some large medical center where he has cadavers to operate on first and especially where he is able to take his training with a man who is doing a large surgical practice, and not subject human lives to his operation or to his ability until he can properly operate. I do not believe that any man who is not capable of operating on anything that is found in the abdominal cavity is capable of operating on an acute appendicitis case. I believe, as Dr. Randall has said, that many of these cases that die in the hands of good surgeons are half killed by the treatment they get at home before being referred to the surgeon. I believe that salts and castor oil help to kill more cases of appendicitis than perhaps any other treatment administered.

DR. N. M. ALLEN, Detroit: I think the most important matter in reducing the mortality of appendicitis is early operation. There are two facts brought to everybody's attention who is doing abdominal surgery or appendectomy. One is that the average case of appendicitis, or at least 40 per cent of the cases, comes to operation late, often at a time when drainage is necessary, and even with localized peritonitis and abscess. The other is that there is no mortality in the operation for appendicitis at an early stage. We know that after 24 hours appendicitis carries with it a mortality of 5 per cent, after 40 hours we have a mortality of approximately 10 per cent, and after 48 hours practically 20 per cent of the patients operated on die. I think if this is brought to our attention and we realize these things and make it a point to warn the patients and warn the men who refer their surgical cases to us, that the mortality can be reduced. It is a well-known saying, I think, of Dr. Moynihan that "it is much better for the patient to have an operator or a surgeon with questionable ability early than a surgeon with national reputation on the third or fourth day." In appendicitis as in gastric or duodenal ulcer the patient should be operated early. I think the main point in the mortality of appendicitis as in other conditions is the diagnosis.

DR. F. B. WALKER, Detroit: My first thought on this paper is that it should be read before the Medical Section instead of this one. I believe it has been pointed out already that the mortality is due first to late operation and the desires of the practitioner to carry the patient through without an operation, and secondly, to the illegitimate use of cathartic remedies.

DR. C. L. BARBER, Lansing: I think the real salient point in the early treatment of appendicitis, and the blame laid at the door of the family physician, was omitted in the paper. The man who has done the most, I think, in this country in his teaching to lessen the mortality of appendicitis is Dr. A. J. Ochsner of Chicago. The method of early treatment which he calls his "rest" treatment—absolute rest of the alimentary tract and absolute prohibition, as the Doctor said, of cathartics, is one of the main reasons for the high mortality of appendicitis. I do not agree with the writer that in

order to keep the mortality down it is absolutely necessary to operate for appendicitis within the first 24 hours. As Dr. Hutchinson said, it is sometimes absolutely impossible to make a diagnosis of appendicitis on the first visit. I do believe that the general practitioner or the surgeon who is called to see a case of appendicitis or one that he suspects is a case of appendicitis should employ the Ochsner method of absolute rest for the appendix and the alimentary canal, because on all sides excepting one the appendix is surrounded by tissues that will prohibit the spread of infection, and nature itself will do the rest if you do not disturb the peristaltic action of the bowels. I think in every case that a man suspects is appendicitis he should administer no medicine or food by mouth. If he has to supply fluids at all, he should do so by the rectum and give the medicine, if he gives any at all, hypodermically.

DR. WILLIAM R. CLINTON, Detroit: I think if these bad cases develop a fistula they get well. We will save some patients where the small bowel is distended if we do a cecostomy and following it up with hypodermoclysis and morphine to keep the respirations down, after the method of Crile.

DR. NATHANIEL GINSBURG, Detroit: I want to say that one of the difficulties met with in appendicitis cases is that of differentiating it from a duodenal ulcer. I think the man who procrastinates after seeing an abdominal case from that time shares the responsibility in the mortality of that case or any other serious case. I believe the time has gone by when the man with a medical degree allows a medical case with a suppurating process to go on without operative treatment for nature to take care of. I think the essayist has brought a very timely paper before this Section.

In the Philadelphia hospitals it is very seldom there is a death from perforation of the appendix or duodenum. We know that the death rate is decreasing. In my experience the mortality is not decided by the individual doctor but by the time element. I have seen patients walking around with appendiceal abscesses; in fact, I had one in my office who had been walking around with a localized abscess for eight days.

As to operative technic, after 48 hours it is unnecessary to consider the anatomic relations, just cut down and free the appendix. Murphy, years ago, spoke of the danger in transperitoneal approach to the appendix and the breaking down of the adhesions which nature has established, thus disseminating the infection. Those are important factors, but I believe the most important factor is early diagnosis. The blood supply of the appendix differing from the gall-bladder is more predisposed to pathologic processes because it contains the largest amount of lymphoid tissue in the abdominal cavity. It has been referred to as the "abdominal tonsil." This may predispose to infection.

DR. W. F. METCALF, Detroit: I will not go into the statistics of this paper, neither will I repeat anything heard in the discussions that preceded. I wish to advise strongly on a more careful history in these cases. Of course, every one admits that early diagnosis is the important salient feature. Early diagnosis implies a carefully taken history. Often in childhood there will be different attacks of indigestion with a lack of development of other symptoms and these attacks are not diagnosed and could not have been diagnosed. I mention this only with the thought that in obscure cases often the appendix is not in the right iliac fossa. Frequently the appendix in cases of most virulent infection is not located in its proper anatomic location and will deceive a careful diagnostician. In such cases a blood examination is of great significance. In many such serious cases there will be no elevation of temperature, no disturbance of pulse rate, but the appendix will be gangrenous. In such cases the blood will show an increase in polymorphonuclear white cells. The blood test should be relied upon where there are no other symptoms except vomiting. Those cases

which give a history of having had appendicitis in childhood often have the appendix misplaced clear up under the gall-bladder. I must emphasize the importance in difficult cases of a blood examination and the importance of not trying to find an appendix which nature has walled off unless it is just where we can pick it up without disturbing what nature has done. Drainage will give an opportunity for future operation. In a great many cases a future operation will not be required. I speak for immediate operation provided it be not general peritonitis. If the peritonitis has become general, I think we should probably wait a few hours to determine whether a wall has been formed.

In a few cases where the infection is streptococci there will never be a wall formed and the patient will die whether you operate or not. That does not mean 48 hours; it may mean only 2 hours after the attack began, or it may mean several days.

DR. C. W. CLARK, Caro: The statement is made that most cases of acute pain in the abdomen in children mean appendicitis. I wonder if the surgeon thinks that every time you have a pain in your stomach you should be operated on and statistics made from that.

DR. JOSEPH H. ANDRIES, Detroit: I want to say a word in defense of the general practitioner. If you take the Year Book of Surgery and look up the statistics for the last year you will find that the mortality of appendicitis among surgeons in the best general hospitals has been 2 per cent. We find in other hospitals not so well regulated a mortality of 8 per cent. That tells us there is something radically wrong with the surgeons themselves. I think Dr. Metcalf hit the nail on the head when he said the time of the operation is not selected. You cannot help getting cases of appendicitis that have gone 48 hours, still taking them altogether your mortality should not exceed 2 per cent.

I find frequently that patients who come in after 48 hours are not very severe cases. If you take the blood count you will find they have a leucocytosis of 30,000, with 90 per cent polymorphonuclears. That is the dangerous case. It shows you that nature has not walled off the abscess and that any manipulation in that abdomen is going to open the lymphatics still more and the patient is surely going to the bad. We have had a number of these cases in which we waited 24 or 48 hours until the blood count changes. We find the leucocytosis goes down and the polymorphonuclears go down and I believe we have saved a number of lives by waiting.

There is another point which Dr. Metcalf mentioned, the gangrenous appendix. I remember a short time ago I was called to see a case of appendicitis. The attending man made a diagnosis of appendicitis and I was called in to corroborate his diagnosis. The patient refused to go to the hospital. This was about 8 p. m. The next morning the attending physician called to see the patient and found him sitting up, smoking a cigar. He laughed and said to the doctor, "You all made a mistake, I have not appendicitis." The attending physician called me up and I told him that the patient either had appendicitis where the septic material had discharged back into the cecum or else he was going to die and that I thought he should be operated immediately. I got a report that same afternoon that the patient had been taken with chills, had a general peritonitis and died shortly after. That is an important thing. You must remember that when you have gangrene of the appendix that the entire appendiceal wall dies off. That patient has no pain, no rigidity, no vomiting, nothing to indicate that he still has appendicitis, but the septic material goes into the abdominal cavity and the patient usually dies of general peritonitis in a very short time.

DR. H. E. RANDALL, Flint, (closing): I do not think there is very much to add to what has already been said. I like Dr. Clark's point. I wanted some one to jump on that particular point. The

thing I tried to bring out in the paper is that appendicitis is a surgical lesion requiring early treatment. If not, we are losing 500 patients a year, which shows we are not making an early diagnosis.

I think at least 40 per cent of the cases lack rigidity of the rectus, but in those cases you will find rigidity of the external oblique. I have been preaching that for years. Secondly, if a child has a sudden, acute pain it usually means appendicitis. If the family physician or surgeon would bear that in mind we would cut down the mortality.

I do not think we should rely on our blood count. I think it is a deceptive thing. It occasionally aids in the diagnosis in obscure cases. If you rely too much, you are going to be absolutely fooled. I have seen low counts and high counts and I do not think you should rely on that absolutely.

TRANSDUODENAL BILIARY DRAINAGE A VALUABLE DIAGNOSTIC AND THERAPEUTIC MEASURE

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The liver, the largest gland of the body, consists chiefly of delicate tissue disposed about the ramifications of the portal vein, being located chiefly in the right hypochondriac region in close proximity to the pyloric end of the stomach, the duodenum and pancreas.

Its functions are numerous and depend upon the properties of the liver cell which constitutes the anatomical and physiological unit of the organ. These functions consist in selecting substances from the blood, transforming them, excreting a part through the bile and returning a part to the blood.

While the bile is a secretion of some importance in intestinal digestion, it is chiefly an excretory product of comparatively little value to the human economy.

The liver is sometimes referred to as the "central laboratory" of metabolism, since it transforms the aminoacids into urea, sugars into glycogen, and stores up fats and iron for use as required.

One of the liver's most important functions is that of detoxication, rendering such poisons as arsenic and nicotine inert, and also acting in a similar manner on poisonous substances resulting from putrefactive processes in the intestinal tract.

We have only briefly referred to the various functions of the liver and wish to deal more particularly with the bile, which is a specific secretion of the liver cell. It is formed continuously to the amount of 500 to 800 c. c. daily, the flow being increased by ingestion of foods, especially those rich in fats and proteins.

The normal bile contains, in addition to water and salts, cholesterin, lecithin, neutral fats, soaps, sometimes a trace of urea, and a nucleo, albumin, the latter a product of the

endothelium of the gall-bladder and ducts.

While the secretion of bile is a continuous process, its expulsion into the duodenum is intermittent, being periodically discharged during the digestive period.

The ejection of chyme from the stomach in normal individuals produces a discharge of bile into the duodenum where it is intimately mixed with the bile and pancreatic fluids.

The neuroregulatory mechanism which controls the storage in and excretion of bile from the biliary passages into the duodenum, is a very good illustration of similar reciprocating mechanisms found in various parts of the body.

Doyon⁽¹⁾ in his study of this neuroregulatory mechanism, found that the gall-bladder receives both motor and inhibitory fibers by way of the splanchnics, the fibers emerging from the cord in the roots of the sixth thoracic to the first lumbar spinal nerves, and pass to the coeliac plexus by way of the splanchnics. Motor fibers may also occur in the vagi. Sensory fibers capable of causing a reflex constriction or dilation of the bladder, are found both in the vagus and splanchnic nerves. Stimulation of the central end of the cut splanchnic causes a dilatation of the bladder (reflex stimulation of the inhibitory fibers), while stimulation of the central end of vagus causes a contraction of the bladder and a dilatation (inhibition) of the sphincter muscle at the opening of the common duct into the intestine.

During normal digestion the afferent path for the reflex which empties the gall-bladder is through the vagus, while the efferent path is through the splanchnics. This reciprocal action of the afferent and efferent nerves referred to by Meltzer, acts in harmony with what he terms the "Law of Contrary Innervation," a disturbance of which he claims is not only responsible for disturbances in the secretion and excretion of bile, but in other functions of the body.

Meltzer⁽²⁾ states that "it seems quite safely established that the physiological discontinuous character of the flow of bile into the duodenum is regulated by a reflex mechanism dominated by the "Law of Contrary Innervation;" that the integrity of the gall-bladder is an important part in this reflex mechanism; that the discharge of bile can be greatly curtailed by the absence, or a restriction, of the discharge of chyme from the stomach, and that the discharge of bile through the papilla of Vater into the duodenum is greatly enhanced by the presence in the lumen of the latter of peptone and albumoses."

He also observed that the local applica-

tion of a solution of magnesium sulphate to the duodenal mucosa in the region of the papilla of Vater caused a relaxation of Oddi's sphincter, and suggested that, in cases of jaundice and biliary colic, a test be made of the influence of a local application of this salt introduced through a duodenal tube.

While Meltzer's "Law of Contrary Innervation" as applied to the simultaneous contraction of the gall-bladder and relaxation of the sphincter has not been demonstrated experimentally, it has, however, been shown that the application of magnesium sulphate to the duodenum in the region of the papilla causes at least a partial and temporary relaxation of the sphincter, thereby lowering the tension to such a degree that under normal conditions bile freely escapes into the duodenum.

The physical appearance and quantity of bile secured in this manner leads us to infer that the gall-bladder contracts in harmony with the relaxation of the sphincter, causing an expulsion of the gall-bladder bile, which is recognized by its color and viscosity.

The carrying out of Meltzer's suggestion with reference to the use of magnesium sulphate solution as a means of facilitating biliary drainage was made possible by the use of the duodenal tube which Einhorn⁽³⁾ in 1909 demonstrated to be of great value in the study of normal and pathological conditions occurring in the stomach, duodenum, pancreas, liver and upper jejunum, as well as in the application of therapeutic measures.

Acting on the suggestion of Meltzer, Lyon⁽⁴⁾ of Philadelphia, was one of the first to demonstrate in a very practical way the great value this procedure possesses from the standpoint of diagnosis and therapeutics in many cases of disease of the biliary passages.

His articles dealing with his findings and results, which have appeared from time to time, are very illuminating and instructive, and have been the means of stimulating many others to adopt duodenal biliary drainage as a practical and efficient means of diagnosing and treating diseases of the biliary passages.

Judging from the results obtained by those using this method and from personal observations, we are justified in feeling encouraged to believe that at last a procedure has been perfected whereby the internist is enabled to discard the empirical and unsatisfactory use of so-called cholagogues, which in most instances act as hemolyzing agents and protoplasmic poisons, probably doing more harm than good, and to adopt the

more rational method of a more direct therapy.

While the method employed in securing bile from the various segments of the biliary tract is quite simple, it is necessary to exercise caution so as to prevent, insofar as possible, bacterial contamination which is likely to take place from the mouth, throat and stomach.

TECHNIC

The technic employed is generally as follows:

The patient presents himself with a 10 to 12-hour fasting stomach, he thoroughly brushes his teeth, using some good tooth paste, after which his mouth is rinsed with a potassium permanganate solution—one to five hundred—then with distilled water.

The duodenal tube which has been kept in an antiseptic solution over night, is freshly boiled, then passed into the stomach while the patient is in the sitting posture. The gastric residue, if any, is then aspirated and saved for bacteriological, chemical and cytological examination and compared with findings obtained from the duodenum.

Then 250 c. c. of a 1 to 10,000 permanganate solution is introduced into the stomach and as much as possible of the fluid removed; the stomach is then rinsed with sterile water until the water returns clear. The patient is then placed on his right side and slowly swallows an additional 20 cm. of the tube, making a total of 75 to 80 cm. from the teeth. The last 20 cm. of the tube should be swallowed slowly, usually requiring not less than 15 to 20 minutes; if swallowed too rapidly the tube is likely to curl in the stomach, preventing the tip from passing through the pylorus, which results in considerable delay in securing the specimens.

We find the passage of the tube into the duodenum is greatly facilitated by gentle manipulation of the stomach under the fluoroscope, and where available we strongly commend its use.

The next procedure is to connect the tube with the first sterile aspirating bottle and the duodenal secretion is aspirated to determine whether the common duct sphincter is closed, then 50 to 75 c. c. of a 30 per cent sterile warm magnesium sulphate solution is douched into the duodenum. Usually this amount is sufficient except in those cases where the gall-bladder is atonic, when it may be necessary to repeat the douching with half to three-quarters of the original amount used.

Before the tube has been completely emptied of magnesium sulphate, it is con-

nected to the aspirating bottle and as much of the fluid recovered as possible. In a few minutes—in normal cases—the sphincter is relaxed and the magnesium sulphate returns tinged with bile which becomes deeper until pure bile is alone recovered. Another bottle marked A is then attached, into which the lemon yellow bile from the common duct flows, until the bile becomes more viscid with a decided change to a golden yellow, or to a condition indicating pathology. At this moment a bottle marked B is introduced into which the darker colored or more viscid fluid continues to flow until there is another decided change in color, usually to a light yellow, and more limpid fluid which indicates freshly secreted bile. At this time a third bottle marked C is introduced and the fluid collected until the drainage is completed.

Normally the quantity of bile collected in bottle A is from 5 to 15 c. c. and is of a light yellow color and slightly viscid; in bottle B 30 to 90 c. c. of a golden yellow or amber color and of a sirupy consistency; in bottle C the amount depends largely on the length of time the drainage is allowed to continue, and the bile is of a light lemon color and more watery than either of the other specimens.

The question naturally arises, How do we know that this darker colored and more viscid fluid comes from the gall-bladder? There are several reasons for arriving at this conclusion.

The amount of light yellow colored bile passed is consistent with the capacity of the chambers from which it comes. The same is true of the more deeply colored second portion. In several cases reported where the gall-bladder was found to be greatly distended, the second specimen obtained was greatly in excess of the capacity of the normal gall-bladder—sometimes several hundred c. c. Several cases are recorded where there was a palpable tumor in the gall-bladder region which disappeared when the Meltzer method of duodenal drainage was used. In some instances an abnormally dark and viscid bile has been observed, similar to that found to exist in post operative gall-bladder cases. This darker and more viscid bile is more concentrated, a condition likely to occur from stagnation. In cases of empyema of the gall-bladder, this second specimen has been found to be teeming with bacteria and pus cells.

In commenting on this procedure, Lyon states:

"In my opinion, the most hopeful feature of this method lies in its practicability of investigating, by clinical experimental observations, in the

attempt to detect some of the physiologic alterations of function of the gall-bladder, liver and ducts; disorders of function, such as the hitherto undescribed entity of functional atony of the gall-bladder; spasm of the ducts and lowered velocity rates of liver secretion, which directly contribute to slowing up of the excretion of bile and bring about biliary stasis.

"For it is biliary stasis that all writers are in agreement as being the forerunner of gall-stones and of inflamed and infected gall-bladders and gall ducts.

"Any successful method of directly determining biliary stasis immediately opens up fields of investigating and explaining such common conditions as we loosely call biliousness, liver lethargy, hepatic torpor, with their resultant migraine and migrainoid attacks with biliary vomiting. * * * If we are to attack the great problem of gall-bladder disease, gall-stones, gall-bladder, and duct catarrhs and infections, and attack it at its source, we must give this lightly passed over symptom-grouping called "biliousness" our serious attention. Thus far our attitude toward the gall-bladder problem has been one of correction of full-blown stages of formed calculi and active catarrhal infection, and the means adopted have been largely surgical. * * * What we must do is to attack the problem with methods of prevention of gall-bladder disease with its sequelae, and this brings us back to attacking the biliary stasis which is at the root of the matter.

"Biliary stasis is followed by over-distention of gall-bladder and ducts, leading perhaps to what we may designate in the future as gall-bladder atony. This engenders a catarrhal state of the gall-bladder and duct mucosa, weakening resistance and permits of successful implantation of infecting micro-organisms filtered out from the portal blood or carried directly to the gall-bladder by the systemic blood or by the lymphatics, or ascending to the gall-bladder by way of the duodenum and common duct or passing through the serosa of the gall-bladder from direct contact with contaminated peritoneal coverings of neighborhood viscera. Biliary stasis, with its concentrated bile and precipitation of its crystalline chemistry, plus catarrh, plus infection, means gall-stones. Therefore, it is biliary stasis that we must attack if we are to prevent gall-stones, catarrhs or infections."

VALUE

While duodenal biliary drainage so far has had only a limited application, the results are so gratifying that we believe it will be only a comparatively short time before it will be used as frequently in cases of suspected disease of the biliary passage as is the fractional test meal in cases of suspected gastric disturbances and with equally satisfactory results.

The value of the procedure is not confined to investigations pertaining to the biliary tracts, but is also of value in determining the presence or absence of the pancreatic ferments which information is of value in indicating the condition of the pancreatic function.

Relaxation of Oddi's sphincter by means of magnesium sulphate also permits the escape of pancreatic fluid into the duodenum

and its absence when bile is present would indicate pathology in the pancreas or its ducts.

In order to reduce the possibility of error to a minimum, the various fluids obtained should be placed in a cooling chamber or examined as soon as possible after they are secured, otherwise changes are liable to occur which increase the possibility of error in the findings.

The fluid obtained from the stomach should be cultured and titrated.

The fluids from bottles A, B and C should be studied carefully as to gross appearance, color, viscosity and turbidity, microscopically for cellular elements, bacteria, leucocytes, crystals, etc.; bacteriologically for number and character of bacteria present. Colony counts from each of the specimens will usually give a very good idea as to the location of the part of the biliary tract infected when infection is present.

Brown⁽⁵⁾ of Miles City, Montana, has had considerable experience in the use of duodenal biliary drainage as a diagnostic aid and has given his conclusions as to the interpretation of aspirated gall-bladder bile as follows:

1. A markedly gall-bladder bile with increased viscosity, which on microscopic examination shows the fluid to be swarming with micro-organisms, the presence of mucus and an increase of cellular elements, is pathognomonic of acute cholecystitis. When the leucocytes show great increase and are of the polymorphonuclear variety, the infection is of the suppurative type, or empyema is present. Cultures usually show staphylococci, streptococci or colon typhoid bacilli, named in order of their frequency as we have found them. At operation we have found many of these cases to be acute exacerbations of chronic cholecystitis.

2. A clear gall-bladder bile, with increased viscosity and suspended flakes of mucus enmeshed with bacteria, a slight increase of leucocytes, from 6 to 15 in a low powered field, is highly suggestive of subacute or chronic cholecystitis. Positive cultures are usually obtained.

3. A clear, brilliant gall-bladder bile with normal or increased viscosity, and usually sterile cultures, may be found in many cases of chronic cholecystitis, especially the "stone" group or in normal gall-bladders.

4. When repeated attempts to obtain gall-bladder bile are unsuccessful but the clear lemon yellow bile is freely obtained, the presence of a cystic duct obstruction is highly probable. We have found this seven times at operation.

5. When repeated attempts to obtain any bile are unsuccessful, the condition is pathognomonic of common duct obstruction.

The presence of bacillus subtilis, streptococcus, salivarius, and micrococcus cattarrhalis or other mouth saprophytes may be regarded as contaminations in the duodenal cultures. When colon bacilli, hemolytic streptococci and staphylococcus aureus are present they may be considered as etiological factors and as probably present in the gall-bladder or common duct or both. Colon bacilli are probably the most persist-

ent bacteria found in the common duct.

Whipple⁽⁶⁾ states that in about 50 per cent of his cases, one or more varieties of bacteria found in the preoperative duodenal bile were present in the gall-bladder bile or gall-bladder tissue.

With reference to the presence or absence of pancreatic ferments, he makes the following statement:

"Complete absence of pancreatic ferments in alkaline duodenal fluid containing bile is fairly definite proof of carcinoma of the pancreas.

"If lipase is deficient, this finding should be taken seriously only if the stools show high total fat content.

"Deficient pancreatic ferments may indicate chronic pancreatitis or advanced pancreatic lymphangitis in a case giving a history of definite gall-stone or cholecystitis history."

One of the greatest difficulties encountered in connection with transduodenal biliary drainage is the proper interpretation of our findings, in the specimens of bile secured from the various segments of the biliary tract, with respect to their bacteriological content. The chances for contamination are so great and the anatomical relationship such that it is almost impossible to secure these specimens under strictly aseptic conditions. We can, however, greatly minimize the chances of contamination by the methods already suggested and in addition by investigation, study carefully the normal bacteriology of the parts from which bacterial contamination is likely to occur, chief of which is the duodenum.

A considerable amount of work along this line has already been done, the results of which are of great assistance in the study of specimens obtained by the Meltzer method.

Escherich⁽⁷⁾ in 1896 found that the upper intestine in fasting children was practically sterile. Later these results were confirmed by Cushing and Livingood⁽⁸⁾ who made observations on animals at the time of operation.

More recently MacNeal and Chase⁽⁹⁾ using the duodenal tube, made a study of the duodenal contents of 24 fasting adults. They found the normal duodenal fluid practically free from viable micro-organisms. The few cultures present were generally those of gram-positive cocci.

In cases where there was gastrointestinal disturbances, the number of viable micro-organisms were greatly increased, consisting of several varieties—bacilli, cocci, yeast and branching thread forms.

In the one case of typhoid fever examined, bacillus typhosus was isolated from the duodenal fluid, and it was suggested that this method might prove valuable in the

early diagnosis of this disease or detection of typhoid carriers.

We have been employing duodenal drainage and lavage for diagnostic and therapeutic purposes for nearly a year, the results becoming more and more satisfactory as our technic has improved, and our findings are quite in accord with those obtained by others who are employing the method.

In several cases our diagnosis has been confirmed at operation. In others, where infected bile was discovered and the patients complained of indigestion and biliousness extending over a period of months or years, the bile became sterile and the symptoms complained of disappeared after the employment of duodenal lavage.

Cases of catarrhal jaundice are usually relieved by this method of treatment in about half the time required by the usual methods employed.

We have met a number of cases in which the pancreatic ferments were absent, which condition we believe justified a diagnosis of carcinoma of the pancreas—in one of these the diagnosis was confirmed at operation.

We have a case under observation at the present time in which on three different occasions flagellate protozoa were found in the bile secured by the Meltzer method. These we have classified as *Giardia (lamblia) intestinalis* which have recently been described as the Causative organisms of "trench diarrhea."⁽¹⁰⁾

Treatment of this case by means of transduodenal lavage is giving satisfactory results.

In Japanese Liver—Fluke Disease (Asiatic Opisthorchiasis,) a disease in which the parasite (*opisthorchiasis sinensis*) may be found in the gall ducts, gall-bladder and in the pancreatic duct, duodenal biliary drainage is a method by means of which we are able to discover the ova of the parasite early in the course of the disease.

We are quite in accord with the statement of Smithies,⁽¹¹⁾ "that by this method, one is able to recognize disease of the gall-tract earlier than by any other clinical procedure."

The early recognition of these cases enables us to employ a rational course of treatment, including biliary drainage and lavage which will, in the majority of cases, relieve the stagnation and clear up the infection, thereby preventing the gross structural changes which are inevitable when biliary stasis exists for a considerable length of time.

While duodenal biliary drainage and lavage have already been proven to be of great

diagnostic and therapeutic value, we would not wish to be understood as advocating it as a substitute for surgery, for there are many cases in which as a result of biliary stasis and infection such gross pathological changes have taken place that nothing short of surgery offers an opportunity for relief.

We are of the opinion, however, that with the general adoption of this method of treatment, the necessity for surgical interference will be greatly lessened.

James⁽¹²⁾ in a recent article dealing with surgery of the biliary tract, makes the following statement:

"The treatment in every case of gall-duct disease, whether it is in the beginning or final stages, is surgical. Every case of gall-duct disease is a surgical case.

Diseases of the biliary passages are essentially surgical and not medical, and the most common cause of failure to cure or relieve your patient is late operation. * * * Let us establish the fact that cholecystic diseases are surgical first, last and always. * * *

Fortunately (for the patient) such radical views with reference to the treatment of biliary tract disease is held by comparatively few surgeons, and we feel quite safe in predicting that within a short time the use of the Meltzer method will convince these that primarily biliary tract diseases are essentially medical, and as such should be treated by the internist.

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DISCUSSION

THE CHAIRMAN: Dr. Stewart's paper is open for discussion. The Chair would like to call on Dr. Karsner of Chicago. He has had a lot of experience in this work. He is associated with Dr. Smithies, one of our Michigan men. Dr. Karsner.

DR. HOWARD T. KARSNER, Chicago: This paper has interested me a great deal. Dr. Stewart, I think, has presented it in a very able manner. He has covered in a way practically most of the points which we have had impressed upon us for about a year and a half.

We have made something over a thousand drainages. The six hundred cases we have now tabulated will be reported or were reported. I think there were three or four papers. I think that report will come before the A. M. A. next month.

We have found difficulties the same as Dr. Stewart. When we started, we thought we knew something about the bile and biliary functions and so on. But the more our experience with protein, the more experience we have and the more cases we have drained, the less we think we

actually know about it, and the more there seems to be a widening up before us of things still to be found out.

We have come to several conclusions. One conclusion that probably is foremost is probably that the gall-bladder causes as much chronic trouble in the abdomen as the appendix itself, possibly more. In other words, there are more chronic gall-bladders being carried around by individuals who are suffering more or less from symptoms which are referable to gall-bladder disease than there are those suffering from appendicitis, acute or chronic, and I might say also more than from ulcer of the stomach.

The diagnosis of gall-bladder disease is, I think—as is carcinoma—a microscopical diagnosis. In other words, the surgeon operating on a gall-bladder finds that he is able to compress the gall-bladder and empty the bile into the duodenum. The wall feels all right. He feels no stone in the gall-bladder and so there is nothing wrong with the gall-bladder. He looks for his trouble elsewhere, and the gall-bladder is not removed and the bile is not examined.

We are firmly convinced that from the specimens which we have obtained from this method of lavage of the duodenum, or of emptying the gall-bladder, diseases in the gall-bladder start exactly like carcinoma does in the stomach. In its early stages it is a microscopical diagnosis. It cannot be made by feeling of the gall-bladder by the manipulations in opening the abdomen no matter how expert the surgeon's fingers may be. There is a time in gastric ulcer when the feeling of the ulcer cannot be differentiated from the beginning of a carcinoma. So also in gall-bladder disease, a surgeon or any one else cannot tell that is a diseased gall-bladder simply by pressing it. We can press on the gall-bladder and find there is no obstruction of the common duct and give the opinion it is a normal gall-bladder—how he guesses that is a diseased gall-bladder and can empty itself is more than we can exactly see. A normal, healthy gall-bladder under normal food stimulation may be able to empty itself. One that is diseased in any way may not.

Regarding the finding in the contents of the gall-bladder we have also found all of the germs or different organisms which Dr. Stewart has mentioned. We have had typhoid in one or two cases. We have found the protozoa in several cases now; and in those cases it is almost impossible to see how the parasites of that class can be thoroughly eliminated.

This is going to open up the question of elimination of intestinal parasites. When some of them find their way well up into the bowel and into the gall-bladder, the surgeon certainly can be helped if we can state, previous to the operation, whether the infection is limited to the common duct and to the gall-bladder or whether it involves the hepatic ducts and the hepatic radicles. If infection has proceeded to such a point that the hepatic radicles are affected, which we know to be true in a great many cases, surgery by the simple extirpation of the gall-bladder cannot accomplish a cure in those cases.

Another large field which is opening up along this line is in cases that come back to the internist after the surgeon has performed everything that he knows how to do. He has extirpated the gall-bladder. He has drained the gall-bladder. He has done everything that modern surgery can do, and still the relief from symptoms is six months, one year, a year and a half, two years—in a large percent of those cases. You all have them coming back to you. There is not a physician who practices any length of time in general practice but what does see a lot of these cases.

We have had considerable experience. We call it considerable experience. We are reporting on 14 cases which have been operated on by some of the best men in the country. We have cases that have had surgery performed by Dr. Ochsner and surgery performed at the Mayo clinic, and surgery performed by various other men. One a

famous New York surgeon. And still the patient is having trouble. Those are the class of cases in which therapeutical gall-bladder drainage offers the only relief from symptoms and the only promise of a cure. As yet, it is only a promise. But the reason of course, we fully believe, is because the infection at the time had proceeded well beyond the gall-bladder and the common duct—I mean into the substance, sometimes even into the substance of the liver itself. Now, gall-bladder drainage, as Dr. Stewart has emphasized, is not a cure-all. But there are lots of cases suffering from dyspepsia who do not think that the condition is such as to warrant surgery.

They do not wish to be pushed into surgery where this offers at least a relief, sometimes a cure. Therapeutically, I think the results so far have been fine. They have been at least equal to that of any other medical treatment in practically any other ailment. So there is a great field in that line.

The failure to secure gall-bladder bile on first drainage is in our experience probably about 10 per cent of the cases. Repetition reduces that to 5; and now on a third attempt we have reduced that to about 3 per cent, as the cases come in to us, or where we are not able to secure gall-bladder bile at all. That may be due to a variety of causes, a great many of which are truly surgical, not medical at all. Stones in the gall-bladder and so on may cause this.

I will say this: We have had a number of these cases in which we are unable to secure gall-bladder bile in which we have made a diagnosis of intermittent stone obstruction or of adhesions and different conditions of that kind. We have had a few of those come to operation. We have been careful to make our pre-operative diagnosis. So far our average has been 100 per cent. It won't be as our experience goes on. The cases so far have been few. They do not exceed 10. We have so far been able, by this method, to diagnose the condition pre-operative. I thank you.

THE CHAIRMAN: Any further discussion?

DR. M. S. KNAPP, Flint: I would like to ask Dr. Stewart if he has had any experience in giving atropin beforehand. In a good many cases quite a little time is consumed with the tube passing through the pyloric valve. I have found in cases not suffering from hypertension that administration of 1-150 of atropin when you start to pass the tube will generally permit the tube to pass through inside of an hour. Of course, as the doctor said, it is necessary that the last part of the tube should be swallowed slowly. One other thing, the length of time of treatment is very materially shortened by the use of an outogenous vaccine.

THE CHAIRMAN: If there is no further discussion we will call on Dr. Stewart to close.

DR. CHARLES STEWART, Battle Creek, (closing): We have occasionally used atropin apparently with good results, however, when the fluoroscope is used gentle manipulation of the stomach greatly facilitates the passage of the tube so we rarely find it necessary to use atropin. There are cases where the presence of the tube in the region of the pylorus produces a pylorospasm in such atropin is of value in hastening its passage.

PROBLEMS IN THE CARE OF INDUSTRIAL INJURIES OF THE EYE

HOWELL L. BEGLE, M. D.
DETROIT, MICH.

I shall discuss in my paper some of the common industrial injuries of the eye, problems which they present to the ophthalmolo-

gist, and principles and methods of treatment.

FOREIGN BODIES IN THE CORNEA

You will agree with me that this minor injury of the eye is worthy of consideration for three reasons: first, it occurs with great frequency; second, it is the cause of much discomfort to the patient, and third, it is occasionally followed by infection, which may result in more or less visual impairment or even in loss of the globe. Each of these facts relative to this injury will be discussed at greater length.

Foreign body in the cornea is the most frequent industrial injury of the eye coming to the ophthalmologist for treatment. I have recently made a count of the last hundred cases of eye injury coming to the Michigan Mutual Hospital in Detroit for medical care and have found:

Foreign bodies in the cornea	75
Traumatic conjunctivitis	10
Abrasion of the cornea	3
Foreign bodies in the conjunctiva	2
Abrasion of the eyelid	1
Contused wound of the eyelids	2
Incised wound of the cornea	1
Superficial burn of the eyelids	2
Superficial burn of the conjunctiva	3
Superficial burn of the cornea	1

There was no major injury among the hundred cases; 75% were foreign bodies in the cornea. Had I taken a larger number of cases I am sure, from previous enumerations that I have made, that the result would not be very different. Undoubtedly as the result of guards placed on grinding wheels and the use of goggles by employes, this type of injury has been markedly reduced, in certain plants, at least, that have been aggressive in safety movements, but it is still far too frequent and in the aggregate accounts for a great many lost labor hours.

In order to cut down the loss of time from this injury, it would be advantageous if foreign bodies could be promptly removed from the cornea in a first-aid room of the plant where the injury occurs. A moistened cotton swab is often sufficient to remove the metallic fragment cleanly before the tissue has become rust-stained. In some shops this is done with good results. Where the foreign body is deeply imbedded, the tissue rust-stained and the eye irritable most shop physicians and general practitioners find these cases difficult to handle. If minor injuries of the eye are to be treated at the plant, I believe it good policy on the part of the employer to have his first-aid department in close touch with a competent eye specialist, and rather than putting hindrances in the way of the injured employe

visiting the latter, this should be facilitated.

It is not necessary to say that foreign bodies in the cornea, including the rust-stained tissue, should be removed with clean eye spuds and with as little traumatism to the cornea as possible. I prefer to sit in front of my patient, using focal illumination, a Hardy and Co. binocular loup and a sharp pointed spud almost exclusively. That the employe may return to his work and loose as little time as possible, I do not in the majority of cases cover the injured eye with a pad and I do not insist on his returning for treatment until the corneal abrasion has entirely healed. I feel that I must defend this statement of my procedure for when I first began caring for industrial eye injuries I felt strongly as a result of training that following the removal of a foreign body from the cornea the eye should be covered and the patient should be kept under my personal observation until healing was complete. By my placing a pad on the eye the latter was kept at rest and the lid prevented from rubbing over the wound, while if the patient returned until the wound had closed over, speedy attention could be given in case infection occurred.

The change in my method has come about in the following manner. I found that many employes object to wearing a pad, others removed it as soon as they were out on the street, some stated that they had more pain when wearing the pad, some could not wear a pad because the other eye was defective and occasionally I could not pad an eye because there had been a foreign body in each eye. Again after removal of a foreign body few employes came back as directed unless the eye was giving them trouble. This state of affairs was accentuated during the war when production was speeded up and employes were anxious to lose as little time as possible. I therefore began leaving the pad off as much as possible and I have not been able to see that it has made any difference. I have had but one case of pneumococcic ulcer occurring after I had removed a foreign body from the cornea. This was several years ago and could not be attributed to the patient not wearing a pad. Another reason why I am loath to put a pad over an eye with a minor injury is that a man is seriously handicapped in getting about the streets of Detroit, with its intense automobile traffic, when he has been suddenly blinded in one eye, which is the effect of the pad.

I have a certain safeguard, however, at the Michigan Mutual Hospital, in allowing these patients to go before healing is com-

plete, and this is an efficient follow-up system whereby patients who do not return to work are visited by a social service nurse or at least their whereabouts ascertained by communication with their employer.

It is surprising of how much pain employees with foreign bodies in the cornea often complain. They say that they have not slept all night, that they have walked the floor the entire night or that they have never before suffered so severely. Undoubtedly the location of the foreign body, its angular character, injury to nerve filaments and temperament are factors in determining the amount of suffering.

After the removal of a foreign body in such cases, I frequently give the patient a solution of boric acid containing a few drops of 4% cocaine solution that he may use, if necessary, to prevent another sleepless night. Cold applications are also advised. Moreover where the patient has suffered much pain, where considerable traumatism has resulted in removing the foreign body and where the eye is irritable, I do use a pad, for I believe by placing the eye at rest it does tend to relieve pain. I think, however, we are often careless in our method of padding an eye. The pad too often does not accurately fit the depression of the eye, and is sometimes too thin, sometimes too thick. The adhesive tape is too long and adheres to the hair, or the pad is too small and the tape adheres to the eyebrow, in both instances making removal unpleasant to the patient. The skin may become abraded by the tape. There is danger of *erisipelis* in such cases. Again the pad is left on too long. It then often becomes so loose that it no longer holds the eyelids closed and the secretions on the pad not only smear the skin, but may be brought in contact with the cornea.

Where I use a pad to cover an eye I instruct the patient to remove it before going to bed. I frequently give him an envelop containing a couple of extra pads and a small package of boric acid powder, the latter to be used for irrigations. Where a pad is to be worn for some time a bandage similar to the "Snug-fit" cover is certainly better than adhesive tape.

In a recent resume by Elschnig relating the experience of his clinic in making pre-operative cultures from the conjunctiva, he states that very frequently they find pathogenic bacteria in the cul de sac. Certainly, however, virulent pathogenic bacteria can not often be present in the conjunctival sac of employees or we would have infec-

tion more often than we do, after minor injuries of the cornea.

To prevent infection after the removal of a foreign body or to arrest the progress of an ulcer if it has developed, it is of the greatest importance that patients after the removal of a foreign body return to the physician if the eye continues to give them trouble. In this respect my method is to warn in a few words each patient of the danger of inflammation or infection and to try to handle his case with skill and interest so that I gain his confidence that he will return to me if the eye does not go right.

One should always be on the watch for patients with conditions present that favor infection. I have never met with ulcer that has developed from a tear sac infection among my industrial cases, but of course dacryocystitis is a very serious coincidence in minor injuries of the cornea. I am wary in the case of individuals with chronic conjunctivitis or blepharitis, facial acne, pyrrhoea, ozaena, or who impress me as being habitually dirty. Such patients should be kept under observation. Most cases of infection, following the removal of a foreign body from the cornea, that I have seen have been in employees who, because they have had no confidence in the person who first attended them, or who through some error were discouraged from visiting a competent ophthalmologist, have remained at home and neglected or nursed the eye with home remedies, and when at last, because of fast failing vision, they consulted an eye specialist a large serpent ulcer had developed.

I have met with the following types of infection following foreign bodies in the cornea.

1. An infiltrated area forms immediately about the site of the foreign body, which sloughs, bringing away any rust stain or debris that may be left after partial removal. The ulcer does not show much tendency to enlarge. Healing is delayed for from 10 days to two weeks and a pin-head sized scar results. Treatment—Eyepad, antiseptic irrigations, cauterization if prompt sloughing does not occur.

2. An area of infiltration forms about the site of the foreign body and extends some distance into the surrounding cornea, appearing like a halo about the primary wound. Unceration is not marked. If the site of the foreign body is cauterized with phenol or trichloroacetic acid and the eye covered, the area of infiltration recedes and only a small scar at the point of the original wound persists.

3. A round shallow ulcer which tends to increase equally in all directions develops about the wound. The edges are usually not undermined. There is no hypopyon. Diplobacilli are often found in the smears. Cauterization with phenol or trichloroacetic acid followed by irrigations, with a solution of zinc sulphate leads to healing in two or three weeks, a thin scar resulting.

4. Typical serpent ulcer, due to the pneumococcus or streptococcus.

I have had some success in treating small serpent ulcers with optochin or by cauterization with phenol or trichloroacetic acid, but in the case of large ulcers where the pupillary area of the cornea is already partly covered, I have learned through bitter experience to put my trust in nothing but the actual cautery, and to cauterize as deeply as is required, both the margins and floor of the ulcer.

BURNS OF THE EYELIDS AND EYEBALL

Burns of the eyelids may be classed as first, second or third degree burns. Inasmuch as burns of the eyeball do not as a rule show blisters, which is the characteristic point of second degree burns, I prefer to use the terms in my records superficial and deep. The most common causes of the burns that I have met with have been acids, alkalis, lime, ammonia, hot metal chips, and molten iron, aluminum, babbitt metal and lead.

Chemical burns have usually been superficial. In industry many of the chemicals used are dilute. Again in most plants running water is quite available and the chemicals can be readily washed out, so that deep burns do not result. Babbitt metal burns of the cornea have been usually superficial. I have seen few lime burns in Detroit.

The most severe burns that I have seen have resulted from hot iron, lead, or aluminum. They are most unfortunate for the patient. Often there is great destruction of tissue with resultant deformity. The period of healing is long and the eye is often painful. Secondary infection may complicate the burn, pneumococcal ulcer, for instance, and then, its nutrition damaged by the burn, the cornea may break down rapidly.

At the first examination one is inclined to under-estimate the damage done. For instance, after a severe burn with molten iron one will perhaps note that the conjunctiva is whitened around the cornea. A small area of the cornea has a ground glass appearance. The undersurface of the upper lid shows possibly a deeply pitted area where a piece of hot metal has remained

until cool. In a week or two the eye looks much worse. The sclera around the cornea is then covered with red granulating tissue with profuse purulent discharge; a large raw surface appears on the cornea. As time goes on the granulating tissue grows over onto the cornea. The corneo-scleral margin in much of its circumference is obliterated. The upper lid unites with the eyeball. In the end much of the upper conjunctival sac is obliterated, the eyeball limited in its movements, the cornea more or less covered with a vascularized pterygium-like scar.

A year ago I had a most unfortunate case from a burn with molten aluminum. The sclera of the left eye was whitened, and the entire cornea had a ground glass appearance. The cornea of this eye sloughed away entirely within 36 hours. The other eye did not appear badly burned, there was a deep pitting of the sclera adjoining one edge of the cornea. The cornea itself was fairly clear. A deep infiltration of the cornea occurred within 48 hours adjacent to the scleral burn. This ulcerated and in spite of cauterization extended over most of the cornea. Useful vision was lost. In my opinion the nutrition of the cornea was interfered with, in this case, by the burn of the sclera, the loop of blood vessels around the cornea being damaged. Secondary infection with ulceration of the weakened cornea followed.

Dr. Denig suggests that where the conjunctiva is burned around the cornea, mucous grafts from the lip should be placed over the burned area after removing the necrotic conjunctiva. This, he believes, if done early will prevent secondary infiltration of the cornea. He attributes the infiltration to harmful chemical products of the burned conjunctiva.

I am afraid I do not fully comprehend his explanation, but I am unwilling to discard his suggestion nevertheless. I think we usually wait too long before grafting, following burns.

I have used a thin lead plate dipped in paraffin to maintain grafts in the conjunctival sac and like it for this purpose.

PERFORATING WOUNDS OF THE EYEBALL

The results that we obtain from perforating injuries depend in no small measure on the kind of first-aid treatment that has been given the patient before he reached us. Of course I refer to those perforating injuries where the injury itself has not been so severe as to preclude all chances of saving some vision in the eye.

A clean pad should be placed over the in-

jured eye and the patient brought as carefully and promptly as possible to the eye specialist. An eye with a perforating injury should not even be examined by anyone but an experienced ophthalmologist. The circumstances of the accident and the appearance of the patient and of the injured eye should be sufficient, without examination to warrant belief that a serious injury has occurred. Unskilled fingers can easily lead to further loss of vitreous and infection.

I like the conjunctival flap method of covering extensive or gaping wounds of the cornea. A flap of conjunctiva taken in any one of several ways and slid over the wound results invariably in sealing the wound and even large irregular wounds heal smoothly behind the flap. Too much, of course, must not be expected. Large wounds of the cornea, even if not infected, are usually associated with marked loss of vitreous and severe tissue damage with extensive hemorrhage into the eye. While the corneal wound may heal beautifully the end result is only too often an atrophic eye.

TRAUMATIC CATARACT

Traumatic cataract presents problems of great interest. As a complication of perforating wounds, even if the other features of the injury are favorable, it means serious loss of the visual function of the eye at least, and occasionally the loss of all useful vision in the eye. I take care of employes with injured eyes for an employer who has had to pay for the loss of three injured eyes, and in each instance traumatic cataract was a prominent feature. Now, whenever I see what appears to be a serious eye injury from this plant, the first question I am asked is whether the employe has a cataract or not and he sighs in relief if I can answer in the negative.

It is difficult to know what to do in the case of patients with partial cataracts. This condition not infrequently results from perforating injuries with lateral or posterior wounds of the lens, from severe contusions, or from small wounds of the anterior capsule that have closed or been sealed by the iris. In time the cataract may become total, it may remain stationary or it may decrease. As a result of the opacity central vision may be markedly reduced while portions of the peripheral field remain fairly clear. As far as the cataract is concerned the cosmetic appearance of the eye is good. It has been my practice not to operate for the removal of the lens in these cases. I have at present under my care a patient who had a piece of brass in the anterior chamber slightly

entangled in the iris. I was obliged to remove the fragment of metal by including it in the excised tissue removed by an iridectomy. A partial cataract now exists which may have been caused by the impact of the metal against the lens capsule or through abrasion of the capsule by the fragment as it was being removed. His vision is—counts fingers at ten feet. For two months he has been getting radium treatments without appreciable change. We hope to continue the treatments two months longer, that we may come to some definite conclusion as to the prospects of betterment in cases of partial cataract through the use of radium.

Cataractous lens matter protruding through a lacerating wound of the lens capsule into the anterior chamber may cause severe pain by pressure against the iris or through causing increased intraocular pressure. I have seldom observed the latter. But in numerous instances I have felt that the swelling lens matter was favoring inflammation. If the lens matter is removed while the eye is still in an acute condition, I believe that it is best to use a general anaesthetic, for loss of vitreous frequently occurs in removing the lens matter due to the fact that the posterior capsule of the lens has been injured as well as the anterior or because the zonula has been damaged.

Despite considerable pain, inflammatory symptoms, and prolonged healing, I am of the opinion that it is well if one can wait till the eye is quiet and white before one operates for the removal of the remaining lens matter. So much of the lens matter may be absorbed that so simple an operation finally as discission may be sufficient to restore central vision.

Is it to the advantage of an employe with a unilateral cataract to have it removed? I am of the opinion that the advantages outweigh the disadvantages. I believe that today with immense automobile traffic on our streets, and with the overhead cranes and other ponderous machinery used in plants for facilitating production, the increased visual field resulting from the extraction of unilateral cataract may be estimated as of more worth than formerly.

What is the percentage of visual loss in an aphakic eye? It has been my practice to estimate the loss at from 60% upward, and to advise that a payment to the injured employe of from 60% upward of the amount fixed for the loss of an eye is a fair one.

Sixty percent is the minimum. The fol-

lowing conditions are to be taken into account in determining the increment to be made to this percentage. The age of the patient, the visual acuity obtained after operation, the cosmetic result, the presence or absence of corneal scars or anterior synchia, whether squint exists or not following the operation, the amount of corneal astigmatism, etc., I think my average estimate has been from 75 to 80 per cent.

Settlements on this basis have been made in the past and I am informed that it is still possible to make them in his manner.

SYMPATHETIC OPHTHALMIA

The numerous theories which have been advanced from time to time to explain this disease still remain theories. While through interesting scientific investigations many facts have been brought to knowledge in favor of this or that theory, no one of them has been established as the true explanation of sympathetic ophthalmia.

Some war literature seems to indicate that sympathetic ophthalmia was surprisingly infrequent as the result of wounds in the late war. Such an impression should not lead us to minimize the danger of this disease as a result of eye injuries. In a recent statement Elschnig attributes half of the blindness arising from industrial eye injuries to sympathetic ophthalmia.

The more conservative we are in allowing eyes with perforating injuries, that are infected, to be retained, the more sympathetic inflammation we shall see. It is difficult to draw up and advise a certain line of conduct in the method of handling eye injuries so as to prevent this unfortunate termination. Many exceptional or unusual cases reported in the literature cause a blurring of the picture that we have in mind of this disease, of the pathological changes that occur, the time of its occurrence in relation to the date of accident, of the frequency with which it may occur after enucleation or evisceration of the sympathogenic eye.

I shall state some of my own impressions and practices:

The usual type of inflammation that tends to favor sympathetic inflammation in the fellow eye is a plastic iridocyclitis, with precipitates on the back of the cornea, a muddy iris, narrow irregular pupil, plastic exudate in the pupil and with fine opacities in the vitreous. Vitreous abscess, a condition often following an infected foreign body lodging in the vitreous, and panophthalmitis are not apt to cause sympathetic inflammation. Operations, especially on the lens, on eyes

that have been subjected to uveitis frequently set up a sympathetic inflammation. A foreign body that lodges in the eye, if it is not accompanied by iridocyclitis, is not likely to produce sympathetic ophthalmia.

An eye which has developed iridocyclitis after a perforating injury should be removed just as soon as it appears highly probable that there will be no useful vision. One should not trust in a two weeks safety period. For such an eye enucleation is the safest procedure. If after enucleation sympathetic ophthalmia does not develop within six weeks one may feel fairly certain that it will not develop.

Eyes developing vitreous abscess or panophthalmitis with loss of useful vision should also be removed early. Evisceration is apparently as safe a procedure as enucleation in these cases. It leaves a better stump, especially if combined with fat implantation, than enucleation, though the healing time is longer than after the latter.

In treating perforating injuries focal sources of infection should be sought for and if found removed. Careful attention to focal infections in soldiers during the war has been given as one of the reasons why sympathetic ophthalmia was not of more frequent occurrence.

DISCUSSION

DR. CAMPBELL: It occurs to me with regard to the paper that it is always gratifying to find when one has pursued a certain course for a number of years, that his confreres finally agree with him on the subject. Even in such a simple thing as wearing a patch for a superficial injury. I believe that the prevention of infection is best conserved by the condition that will promote drainage from the conjunctival sac. Then there are certain bacterial flora which do not live well under the sun light. In putting a patch on that kind of an injury, it soon becomes soaked and filled with germs, and you have a poultice. It seems to me that superficial injuries are best handled by not putting any dressing at all on them.

The subject of infected ulcer of the cornea has been introduced and he has given us some good information on it. There is a method for the control of superficial keratitis, the Bierhof method of treating these infections. Putting a speculum in the eye the cup of the ulcer is filled up with a solution of iodine, one-fourth, iodide of potassium 50% and water 25%—that is Lugol's solution. This is allowed to remain in the cup made by the curetting of the ulcer until it dries out, which will be about five minutes.

Another thing with regard to the sepsis of the cornea is that in this situation nature's method of controlling the inflammation is by the natural processes of the body, that is by an increase of leucocytes in the body. It has been found there is a certain method by which we can cause these to increase rapidly, i. e., by the introduction of a foreign body. The only suggestion is the use of sterile milk. It has a wonderful influence on the leucocyte count. Before injection you will find eight to nine thousand white cells, and after injection it will go up to fourteen thousand. The philosophy of the thing is easily seen. In introducing a foreign body into the circulation it also draws out the infection. That is of value not only in traumatic infection but in post operative in-

fection as well. In cataract operation where there is sepsis the use of sterile milk hypodermically will be useful.

An interesting thing is that an aluminum burn is serious. They never do well but always do badly. The melting point is very high, and when the aluminum in a liquid state gets into the eye the temperature is very high and we get a greater effect than we do with a burn with iron.

The projecting lens may have the same effect as if a foreign body lies in the anterior chamber in contact with the structures of the eye. It is surprising what an improvement the removal of that lens matter will make. It is not necessary to remove it all. The result we are after is attained by removal of that portion of the lens matter which is irritating the eye. It is only necessary to make a small incision.

Sympathetic ophthalmia is always important and I have found a good deal of comfort by the study of the blood picture. Increase of the large mononuclear cells is very significant of impending sympathetic ophthalmia. I have seen the cells run up 10 to 15 per cent, where the normal is four. The eye will be enucleated and then in a few days the count will be normal. I think that an important point as to the pending of sympathetic ophthalmia.

DR. HICKEY: I would like to say a word with regard to the X-ray being made as early as possible after the injury. If this is done in a few hours after the injury the outlines can be made out much more accurately than it can be done later.

DR. BEGLE, (Closing): I merely wish to thank Dr. Campbell for supplementing my paper.

TREATMENT OF SUB-ACUTE AND CHRONIC OTITIS MEDIA WITH THE USE OF THE X-RAY

ROBERT BEATTIE, M. D.
DETROIT MICH.

In looking over the literature of recent years on the treatment of acute and chronic otitis media, I failed to find any reference to the use of the X-ray.

In the spring of 1920, following the epidemic of influenza, there developed a great many cases of acute otitis media. A great many of these ran the usual course and got well; some of them involved mastoid and operation was necessary. There were a number, however, that did not clear up. They did not have the typical mastoid symptoms, but seemed border-line cases.

It is my practice to have these cases X-rayed as an aid in diagnosis. To my surprise several of the cases cleared up entirely within two or three days. At first I thought it was merely a coincidence, but when so many cleared up I began to think there must be something of real value in the X-ray in these cases.

I decided to try it out on a number of children so afflicted in the Children's Dept. of Providence Hospital. Dr. Geo. Chene, Roentgenologist for the hospital, was consulted and he kindly consented to Ray these children.

Not knowing how much X-ray to use, and

judging the results obtained from exposure sufficient to make a picture, we decided to continue with the same amount on a few cases.

Four were selected. The length of time these children's ears had been discharging ranged from four months to 13 months. Although these cases had had very good care, and various medications tried, nothing seemed to be of value in stopping the discharge and odor. After the first treatment the child whose ears had been discharging for four months had both ears cleared up entirely in less than one week. Two of the other three were decidedly improved, the discharge greatly lessened, the excoriations in the external auditory canal entirely gone and almost total absence of odor. These cases were given the same amount at intervals of once a week for three weeks, but they did not clear up entirely. This is probably due to the fact that they only had a 15 second exposure, while those who were rayed for aid in diagnosis all had four exposures of 15 seconds, four plates being made for comparison.

The report of these four cases is as follows:

Feb. 11, 1921. Irene, 2 years old, both ears involved. Duration of condition, 4 months. Originally had diphtheria. Two exposures were given one week apart. Fifteen second exposures. The condition entirely cleared up in both ears after the first treatment, but second treatment was given to make it more effective.

Jos. Goyt, age 1 year, 10 months. Right ear. Duration of condition, 13 months. Originally had diphtheria. Culture from ear showed colon and staphylococcus. Three treatments were given at intervals of one week. There was a marked lessening of the discharge and odor, and the excoriations in the external auditory canal had entirely disappeared. Fifteen second exposures were also given in this case.

Jos. Lupo, age 18 months. Right ear. Duration of condition, 1 year. Culture showed *Staph.* and *Staph.* Three exposures given same as above case with practically same result as preceding case.

Jos. Peolk, age 2 years. Right ear. Duration of condition 9 months. Culture sterile. One fifteen second exposure with indefinite results.

The last three cases left the hospital before further treatment could be given.

The first case is still in the hospital and under observation.

We decided to change our treatment, and we are now using:

Six and one-half inch gap. 10 in. skin target distance. Three milliamperes. Three minute exposures. Three millimeter aluminum filter. 1 thickness sole leather.

This is Dr. Chene's technic.

What is the pathology of these ears, and what is the action of the X-ray on these pathological conditions?

It is not within the scope of this paper to go into detail regarding the etiology of these

diseases. Suffice it to say that the vast majority arise from within the nose and nasopharynx.

PATHOLOGICAL CONDITIONS

There is an inflammatory involvement of the eustachian tube, an invasion of micro-organisms, a thickened and swollen condition of the lining mucosa of the tympanic cavity and a purulent exudate ensues. Even after the spontaneous rupture of the drum, or incision of the same, these cases do not all clear up. Some resist the ordinary treatment and keep on discharging. The disease may involve the auditus, mastoid antrum and mastoid cells. As the disease progresses, new connective tissue elements are added which eventually serves to establish the chronicity of the disease. The hyperemia gradually subsides, and excrescences appear which usually become true granulations. These granulations may later be recognized as aural polypi. Again epithelium may extend through the perforation from the external auditory canal. This epidermis may become exfoliated and retained as foreign matter, thus promoting irritation and aggravating the otorrhea. This exfoliated epithelium with the pus is known clinically as Cholesteatoma. The odor is very offensive. This condition may go on to caries, necrosis, sclerosis, pressure atrophy, etc.

What is the action of the X-ray in these cases?

According to Roentgenologists:

"The X-rays possess no germicidal properties. The action is that of stimulation to the body or tissue cells sufficient to overcome the low grade virulence of the infecting micro-organism.

"The physical action in these cases resembles that of vaccines in raising the opsonic index."

I have mentioned my experiences to a number of my colleagues, and a few of them have tried the treatment on their cases. Some of them have kindly consented to have the results of this treatment reported in this paper.

Following are a few of my cases:

Case 1.—Mr. M. age 30 years. Bank clerk. Contracted cold in the head in Oct. 1920, which was soon followed by an acute otitis media. A free incision of drum was made at first visit. Culture showed staph. and pneumococcus. There was a profuse discharge, which despite good care, kept up for two and one-half months. He was having a slight rise of temperature with some tenderness over mastoid, and an X-ray was advised. The plate showed some involvement of mastoid cells as compared with the other mastoid. The discharge at this time was sufficient to make it necessary to change the cotton 8 to 10 times daily. The following day I informed him that the mastoid was involved, and that an operation was necessary. The patient said that he felt better and had to change the cotton only twice all day. I said, that on account of it stopping suddenly, I felt it was more necessary to do a mastoidectomy. But he was feel-

ing so good. I decided to wait. The following day there was scarcely any discharge, and, within three days from the time of the X-ray, the ear had dried up entirely, and has remained so ever since.

Case 2.—Mr. H., an inspector. Contracted a cold in the head March 13, 1921. A few days later he developed an otitis media. The tympanum was incised and drainage established. Culture showed strep. and staph. This continued to discharge until April 26, 1921. At the end of this time, on examination, I found that the discharge was coming from the anterior superior portion of the drum. It was not profuse, but troublesome with some pain and tinnitus. An X-ray was given and the discharge and symptoms cleared up within three days.

Case 3.—Master L. N., age 10 years. Attending boarding school at Munro. On Jan. 20, 1921, developed cold with otitis media following. Spontaneous rupture of drum occurred and there was a very profuse discharge when I first saw him. Culture showed staph. and pneumococcus. The boy remained home for a week. He then returned to school and instructions were given for his care. He returned at each week-end, although he had good care the discharge was profuse. One treatment of X-ray was given and within a week the discharge had stopped. His ear had been discharging 5 weeks when X-ray was given.

Case 4.—Mrs. B., age 27 years. Referred to me by her family physician. Gave a history of chronic otitis media of 7 years duration. Examination showed large perforation high up in the drum with granular tissue protruding through. An X-ray treatment was given, and at the end of a week, she returned for another. At this time, the granulation, that had been visible, had disappeared. The discharge was very slight, no pain and feeling comfortable. Altogether three treatments were given with marked improvement. This case is still under observation.

I have had 14 cases. Three of the first four had only 15 second exposures, and being boarding babies at Providence Hospital, were removed before further treatment could be given. These were not cured. Two of the 14 are still under treatment, and the remaining nine have all cleared up with from one to three treatments.

Dr. Dempster reports having treated 15 cases, the discharge of five having ceased after one treatment. One, a boy whose ear had discharged 10 years, responded completely to four treatments. The remaining cases were all markedly improved.

Dr. Dempster's technic is as follows:

The hair is protected by strips of lead rubber placed about the ear, and a cone of Rays is directed over the external auditory meatus.

Six-inch gap.

Four milliamperes.

Five minute exposures.

Two millimeter aluminum filter.

One thickness of sole leather.

Drs. Mercer, Schurman, Waldeck and Woodworth have all used this treatment with practically the same results.

One of Dr. Woodworth's cases:

C. M.—Male, age 11, school. Tonsillectomy one year ago. No previous trouble with ears. Somewhat nervous, but otherwise a healthy, normal school boy.

History of present illness—Four weeks ago, con-

tracted what appeared an ordinary cold, pain developed in ear third day from onset of cold. Palliative measures by family doctor helped to relieve pain, and ear drum ruptured on second day of attack spontaneously. Profuse discharge, pains diminished and discharge practically ceased in about six days. Three days following, pain reappeared followed by discharge. No abatement of symptoms for almost four weeks when I saw the boy for the first time. Examination—External ear about normal, profuse purulent discharge from R. canal, no redness or tenderness over mastoid region, but complaints of sharp pains in the ear itself. Smear from canal showed strep. and pneumo. organisms, temp. 99.8. The canal was quite red but had no bulging, ear drum dark red and perforated. Tried the usual irrigations, etc., but failed to make much headway in diminishing the discharge. Had a plate made of the mastoid region three days later which showed some cloudiness of the cells. Plate made on Feb. 19, followed by some slight cessation of discharge. Feb. 24 had an X-ray treatment and in two days the ear canal was perfectly dry and has remained so up to date without any further disturbance.

CONCLUSIONS

While my experience with the X-ray treatment is limited to a few cases, I am thoroughly convinced that it is of decided value in the treatment of the sub-acute and early chronic types of otitis media.

In the chronic cases where there is a necrosis of bone, it is of doubtful value.

I am also of the opinion that the kind of infective micro-organism found makes very little difference.

DISCUSSION

DR. GEO. C. CHENE: There is a rational reason for the use of radiation in these cases as it has been demonstrated that radiation stimulates granulation and the lymphatic tissues and has an influence on bacterial infections and even stimulates the healthy regeneration of bone. Therefore, there is some reason for its use.

The technique should be restricted, I think, according to the individual case, using deeper therapy and a larger area where the tonsil and cervical glands are involved, which tends to prolong these infections. Where there is considerable granulation tissue, rays of less penetration and less filtration, I believe, are indicated. All the cases I have observed have shown marked improvement, and part improved which had existed for 12 years or more, although these have had periods of remission; and whether we may be going through a period of remission following our treatment will require a longer time to demonstrate. I am ultra conservative about the method, but I very much believe it is worth while.

DR. AMBERG: I congratulate the essayist on the success of his treatment in his cases. From December 1, 1916, we had under observation Mrs. C. D., 44 years old. The patient had had a discharging ear for about three weeks. On November 28 the heretofore scanty discharge became copious, about 1 ounce in three days. On December 2 I incised the drum membrane. The mastoid was tender on pressure over the antrum and then over the anterior portion and tip off and on until January 4, 1917. The drum membrane was practically normal January 16, 1917, but patient had a slight relapse January 20, 1917. Patient then recovered. My records show seven hearing tests. A slight improvement in hearing could be demonstrated December 15, 1921, and a more marked one December 20. December 16 the culture showed yellow staphylococci; the blood count January 29, 1917, white cells 8,200; polymorph. 69%; small lymph 21% transitionals, 7%; large lympho. 2%; eosinophiles 1%.

Dr. Haas had the patient under observation on account of a profound anemia and thyroid symp-

toms. The decision between expectative and aggressive treatment was made difficult by the general condition of the patient and imposed upon us especially close attention and an increased responsibility. The clinical symptoms were controlled by eight diagnostic Roentgenograms made by Dr. Hickey, December 1, 14, 19, 1916, and January 3, 18, 31; Feb. 15, 21, 1917. The Roentgenpicture showed rather definite cloudiness December 14 and an improvement December 19.

I was rather reluctant to have the patient exposed so frequently to the X-ray, but I thought I had no other choice under the circumstances. At that time I expressed the opinion that I was under the impression that the rather frequent exposures to the X-rays might have been one of the factors which brought about a recovery.

I have tried repeatedly since that time to induce roentgenologists and laboratory workers to undertake experimental work on animals in order to test the efficiency of the Roentgenrays on middle ear suppurations. These tests must, no doubt, be made in order to place such a treatment on a sound basis and to avoid the pitfalls which may accompany indiscriminate use of such a possible remedy. The observations of Wittmaack and his views will, in my opinion be of great assistance if not of a decided *sine qua non* in this work.

Dr. Goosman, of Cincinnati, wrote me May 13, 1921: "It is an old observation that X-ray exposure of the mastoid for diagnostic purposes sometimes gives relief to the symptoms. This is due probably, to the well known effect that X-rays have on granulation tissue or any other rapidly multiplying cells. I am not prepared to say how much good the X-ray will do in otitis media, although I am using it in a conservative way experimentally."

I may add that at the present practically abandoned use of Bier's congestive hyperaemia—and the same may, under circumstances, also apply to vaccine therapy, may serve as a warning to be rather careful with the employment of remedial factors until their usefulness and freedom from danger, especially by masking the symptoms, has been fully demonstrated. Just as Dr. Varney had good results in old pyogenic eczema of the outer ear canal and with polyps of the nose in chronic infection of the same by the X-ray treatment. There may be a field of usefulness in some forms of middle ear suppurations by enabling the tissues to cope with the infection. Further observations and experiments may add the Roentgenrays to the otological armamentarium.

DR. BERNSTEIN, Detroit: I heard the excellent paper of Dr. Beattie the other day and mentioned an old case of chronic mastoiditis in a young man on whom I had done a rather successful, as I thought, mastoidotomy, and retained a discharging ear; and I had several X-rays taken to determine if there was a focus of infection still there. But it had no effect whatever. I think there is a field for this in some of the cases of acute otitis media accompanied by a profuse discharge, no rise of temperature or constitutional symptoms which seem to not yield to the ordinary modes of treatment. In these cases the application of the X-ray may be of avail. I expect to make use of it in such cases.

DR. BEATTIE, (Closing discussion): I have nothing further to add, only to thank those who took part in the discussion.

SOLE PRINT IDENTIFICATION OF THE NEW BORN

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We recently instituted, in the Maternity Department of St. Mary's Hospital, the routine sole printing of all of the new born infants. The inquiries received and the interest shown by members of the profession as

well as the laity, led us to believe that a wider understanding of the method and the reasons for its adoption might not only be of interest, but might also lead to its introduction into other hospitals.

Every physician who includes obstetrics in his practice, has, when attempting to hospitalize such cases, been met with the fear on the part of the expectant mother, that the babies may be mixed in the nursery. In some instances the fear is not sufficiently compelling to evidence itself in more than an expression of the fear or question concerning it, but many times it is the cause, or the assigned cause, for refusal to accept hospital care.

It must be admitted that the fear is not entirely groundless; in fact, that such a mixing of babies has actually occurred. A former patient, on a visit from one of the southern cities where she is now a resident, informs us that at the time she left a case was pending in the courts, the complainant asserting that the baby brought to her, and the one she took home with her, was not, in fact, her own. Incidentally, during the progress of the trial the baby in question died. We have no present knowledge of the outcome of the case, yet one might easily venture a guess, that the decision was rendered against her. Such a contention would be almost impossible to prove. Were the decision adverse and had the baby lived, the mother would probably never have been able to rid herself of the belief that the child was not her own. In fact, her feeling toward it would have been very different from that expressed toward a child she knew was not her own but had voluntarily adopted.

We are careful of the patient's mental attitude toward the purely physical details of her condition, frequently reassuring her, realizing that pregnancy and labor have a psychological as well as a physical aspect. The routine we have established is intended to do away with one source of anxiety and worry, adding by that much to the patient's well-being.

The routine, briefly, is this; prints of the soles of the baby's feet and of the first three fingers of the mother's right hand are impressed upon a card, this being done before they are removed from the delivery room. The mother's finger prints are added to prove the baby's sole prints. If a case should ever come up for determination and the sole prints alone appeared, it would be necessary to prove the authenticity of the prints and the value of the system would have been nullified. Prints are made before

removal of the patients from the delivery room for the same reason. Possibility of the babies being mixed begins only with the entrance of the baby into the nursery, consequently, the impressions are taken before that contingency might occur, and also before mother and babe have been separated.

The impressions are taken by the house doctor who is on service at the time, and not more than five minutes should be necessary for the entire operation. Once or twice a week we classify the prints and file them. A separate index is kept, including the mother's name, babe's name, and classification formula, should it become necessary to refer to any of the prints without a duplicate print to serve as a guide. Should the question of identity ever arise, sole impressions will be taken of the questioned infant and compared with those originally taken. If the two sets of impressions tally, the matter of identity is settled absolutely.

The apparatus used is the same as is used in taking finger prints; a glass slab on which to spread the ink by means of a composition roller and a little printers' ink. A small portion of the ink is thinly rolled out on the glass. Instead of applying the foot to the glass slab as is done in obtaining finger prints, we have found it better to apply the ink to the foot by means of the roller. The foot is then pressed lightly on the card held in place on a wooden block. But little experience is necessary to enable one to take satisfactory prints.

Several of the hospitals of the country, notably in the east, have introduced sole printing of new born infants, but so far as our knowledge goes, we are the first to carry the system to its logical end—the classification and filing of the impressions. The system of classification used is that devised by Wilder and Wentworth and described in their book, "Personal Identification."

The skin of the soles of the feet, the palms of the hands and of the palmar surface of the fingers differs from that in any other part of the body, being thrown into ridges, the so-called "friction ridges." These ridges by their turning and curving, form definite patterns in certain locations. The patterns being of a fixed number of general types makes classification of the impressions possible. In general, however, the ridges do not pursue a uniformly unbroken, parallel course. Here a line comes to an abrupt end, there a line bifurcates, here a line bifurcates, but the two limbs again join to enclose a little island of skin,

there occurs a short line, while between two parallel ridges in another portion appear ridge dots, representing a ridge that has never arrived at maturity. These latter characteristics are made use of in testing two impressions to determine whether or not they were taken from the same individual.

Finger prints are the most satisfactory to use, but it is almost impossible to obtain them from infants. The same applies to palm prints. In the case of the feet, however, the toes do not enter into the determination of a classification formula, so it makes no difference if the toes are blurred in the print, since the foot may be held steadily enough to obtain a good impression.

Identification by means of finger prints has received judicial sanction as constituting absolute identification. Although no legal precedents have been established in connection with sole prints, the same tests are used and the same rules apply, and it would be an entirely easy matter, should a case require it, to prove their infallibility equally with finger impressions. Nature constantly evidences a distaste for duplication. The wing mottling of two butterflies of the same species shows uniformity in some general characteristics, but minute examination discloses essential variations. However, leaving out of consideration this, which seems to be a natural law, it is possible to mathematically determine by the law of probabilities, that no two impressions of any of the friction ridge surfaces can possibly be identical unless they were taken from the same individual.

Variability, permanence, immutability, have been laid down as the essentials of a perfect system of identification. Friction ridge identification is the only system now known which perfectly fulfils all three requirements; variable because there is sufficient difference in a fixed number of type patterns to make classification possible; permanent since they are present from the time of their formation at some period of intra-uterine life until decomposition after death; and immutable since examination of impressions taken from the same person at different ages proves that there is no change in the slightest detail.

Our brief experience at St. Mary's Hospital has clearly demonstrated that to those who are most vitally interested—the women—the method does make a very definite and strong appeal. To the hospital it is not only a part of its up-to-the-minute equipment, but functions precisely as does in-

demnity insurance. The time required for its application is absolutely inconsiderable when compared to the service it might render should the occasion ever arise.

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ARTIFICIAL PNEUMOTHORAX IN ACUTE TUBERCULOUS PNEUMONIA, PULMONARY ABSCCESS AND PULMONARY HEMORRHAGE*

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So much has been written in recent years to show the value of artificial pneumothorax not only as a palliative but as a curative measure in the treatment of chronic pulmonary tuberculosis that the mere narration of additional experience with such cases would not prove especially interesting, or profitable. Few cases, however, of the treatment of acute pneumonic phthisis by artificial pneumothorax are recorded in the literature and most of the reports I have seen were written during treatment or soon after its discontinuance. My own experience with 5 cases shows that a much longer period must elapse before judging of the final results of such treatment and I thought a brief narration of the cases might be of value.

Case 1. Mrs. H. D. W., age 25. In 1901 had some tuberculous glands removed from the neck. In 1911 expectorated less than a teaspoonful of blood but thought it came from her throat. Was in her usual health until the birth of her first baby. March 10, 1914, after which she did not regain strength and began to cough with chills, fever, pain in the right side, etc. April 11, had her first hemorrhage and from then until May 27, had 24 attacks of hemoptysis varying in quantity from ½ to 4 oz. Expectoration 2 ozs. a day. When I first saw her, May 27, she was very weak, had a pronounced anaemia, pulse from 130 to 150 and temperature reaching 103 each day. The upper lobe of her right lung was consolidated with suggestions of cavity; coarse and medium-sized rales were present in the lower lobe. The left lung seemed normal. I succeeded in injecting 1,000 c. c. of nitrogen into the pleural cavity after which there were no more hemorrhages. The patient improved gradually and steadily and by March, 1915 was in apparently good health. During the spring she developed a pleural effusion in spite of which she continued attending to her household duties. There was but little cough and expectoration, pulse and temperature were normal and she weighed 148 pounds. In the spring of 1917 it was apparent that active disease was invading the left lung after which she gradually declined until her death in February, 1918, four years after the beginning of her illness. About two

*Read before the American Climatological and Clinical Association at Lenox, Mass., June 3-4, 1921.

years of this time she was in splendid health and I exhibited her before the Grand Rapids Academy of Medicine as an illustration of an apparently arrested case of acute tuberculous pneumonia.

Case 2. Mrs. W., age 56 years. Always frail. Usual weight 100 pounds. Had a slight cough for several years but consulted no physician about it. Was in her usual health until August, 1914, when she was taken acutely ill with pain in her chest, fever, etc. A diagnosis of lobar pneumonia was made. The crisis did not come at the usual time and a little later tubercle bacilli were found in the sputum. She was then sent to a sanatorium where a diagnosis of acute tuberculous pneumonia or galloping consumption was made, and after several profuse hemorrhages she was sent home to die. I saw her early in October when she weighed 83½ pounds, pulse 130, temperature 99 to 103 daily. Expectoration 3 to 4 oz. a day. The upper lobe of the left lung was consolidated with signs of cavitation. Lower lobe contained scattered medium sized rales. The apex of the right lung also showed evidence of disease. The remainder of the lung seemed normal. Owing to the severe hemorrhages I instituted artificial pneumothorax at once and succeeded in getting a pretty complete collapse of the lung, as far as could be determined by physical signs. Her improvement was immediate and marked. There were no more hemorrhages, temperature and pulse gradually became normal. The sputum was reduced to ¼ oz. a day. By spring she weighed 97¼ pounds which was about as much as she had weighed in a good many years, and she was well enough to take a 10-mile automobile ride to town to have an X-ray picture taken which showed a complete collapse of her left lung. At the end of six months she developed a large pleural exudate which never disappeared. In spite of this she remained in fairly good health, looked after her household duties and did most of the nursing for her 14-year-old son, who had active tuberculosis for a year. In the fall of 1917 she had a severe bronchitis in the right lung, after which I discovered that the pleural exudate had become purulent. She gradually failed in health but was up and about as usual until her sudden death early one morning in April, 1918, 3½ years after the beginning of lung compression.

Case 3. L. W., age 20. Height 5 feet, 4 inches. Usual weight 115 pounds. Never strong, but no serious illness. Some cough for six years which was not considered of any significance. In usual health until October 10, 1915, when he was taken ill with what was called pneumonia in the left side. When I was called, two months later, a diagnosis of acute pneumonic phthisis was made and artificial pneumothorax instituted. A complete lung collapse was readily secured. His improvement was immediate and within three months he weighed 5 pounds more than ever before. At the end of 6 months he developed a large serous effusion. His heart and anterior mediastinum became markedly displaced to the right and several attempts were made to remove part of the fluid to allow the heart to return to its normal position. This was attended by so much dyspnea, with attacks of paroxysmal tachycardia, that it was decided to leave the fluid alone. In September, 1917, two years after the beginning of his illness I exhibited him before the Michigan Trudeau Society as an illustration of the beneficial results of artificial pneumothorax in such cases. He continued in good general condition and did a little work for a couple of years. In September 1919, he went to Florida for the winter and soon after arriving there

had an attack of influenza from which he did not fully recover. Several months later the fluid in his side was found to be purulent and was removed, after which he rapidly declined and died in September 1920, five years after the beginning of his illness.

Case 4.—B. S., age 20. Had been ill but six weeks when I first saw him in January 1917, during which time he had lost 20 pounds in weight. His maximum daily temperature was 102 to 103. Pulse rapid. Expectoration 5 to 6 ozs. a day. The physical signs showed consolidation of the upper lobe of the right lung. Tubercle bacilli and elastic tissue were found in the sputum, and acute tuberculous pneumonia was diagnosed. An X-ray picture, confirmed these findings. Lung compression was begun and a month later another X-ray picture showed an almost complete collapse of the lung. It also showed that the pneumonic consolidation was confined to the upper lobe, the different degrees of collapse in the upper and lower lobes being beautifully shown in the picture. At the end of a month his temperature was normal; pulse 75 to 90; sputum reduced to 2 oz. a day; appetite good and he had begun to gain in weight. At the end of 6 months he was in good general condition but had developed a large exudate preventing the introduction of any more gas, so I let him go home for a short visit. Two weeks later I was hurriedly called and found he had developed broncho-pneumonia in the left lung. He died 3 days later. An autopsy disclosed a most remarkable condition. The right pleural cavity was full of fluid and it seemed at first as if the lung had entirely disappeared. On removing the fluid the remains of the lung were found at the back of the cavity next the spine, contracted down into a hard cartilaginous mass smaller than my closed hand. I sent the specimen to Dr. Warthin who had never seen any thing like it before. On section it was seen to be honeycombed with cavities. The left lung showed acute broncho-pneumonia.

Case 5. Mrs. K., 26 years old. Always had good general health; usual weight 140 to 145 pounds. When 16 years old had a few tuberculous glands removed from the right side of the neck and two years later several tuberculous glands from the right axillary region. She was then in perfect health until December 1919, when she developed a little cough. March 6, she became acutely ill with pain in the chest, chills, etc.; a physician was called who diagnosed lobar pneumonia. The crisis did not come at the end of the week; pain, fever, cough, expectoration, rapid loss of weight, etc., continued and when I first saw her, May 1, she had gone down to 103 pounds. Physical signs of consolidation in the upper lobe of the right lung were present; some moderately coarse rales in the lower lobe, the left lung seemed normal. Her general condition was exceedingly critical; pulse 140 to 150, temperature 103 to 104. Acute tuberculous pneumonia was diagnosed and artificial pneumothorax instituted. Her improvement was immediate and rapid. Pulse and temperature were normal at the end of 2 months. She soon began gaining in weight and at the end of 6 months weighed 145 pounds. She has done her own work a considerable part of the past winter and as far as looking and feeling goes is perfectly well. She still has a little cough and slight amount of expectoration. So far no fluid has developed in her side. An X-ray picture shows a complete collapse of the lung with the exception of a fold in the posterior part of the lower lobe which is adherent to the chest wall near the diaphragm. She is receiving gas once a month. If I can keep control of her for

the next 2 or 3 years, I confidentially expect a permanent recovery.

(Note: Nov. 1st, patient is still in apparently perfect health and weighs 164 pounds).

Acute tuberculous pneumonia must be differentiated from acute tuberculous broncho pneumonia which is usually bilateral and therefore not suitable for artificial pneumothorax. My experience with these 5 cases is such that I believe every case of acute tuberculous pneumonia should be offered the benefit of artificial pneumothorax unless definite contra-indications exist, and the earlier treatment is begun, the greater are the prospects of recovery. The diagnosis is often impossible in the initial stages as the symptoms for the first few days resemble those of crupous pneumonia. Even during the stages of caseation there may be but little sputum and tubercle bacilli may not be found until softening and exudation into a bronchus has taken place. If tubercle bacilli are found in the sputum during the first week it does not prove the pneumonia to be tuberculous, as any patient with chronic tuberculosis may have crupous pneumonia; in fact such patients stand crupous pneumonia exceedingly well. One of my cases of ten years standing went through an attack of lobar pneumonia in the lower lobe of her good lung, last winter, with a crisis on the 7th day. Three days later the upper lobe became consolidated with a crisis and normal pulse, temperature and respiration on the 4th day. She was out of bed and little the worse for her illness three weeks later. If in a case of pneumonia involving one lobe or an entire lung the crisis does not come at the proper time, if the temperature becomes irregular, the pulse quicker, sputum more profuse and the patient rapidly loses flesh and strength, acute pneumonic phthisis must be thought of and lung collapse instituted as soon as diagnosed as such. Without it death within a period of from one to three or four months is the rule to which there are but few exceptions. Some authorities say the disease is "always fatal."

The cases just reported show that lives can be prolonged 3 or 4 years, and if treatment can be instituted early, before extensive softening and excavation have taken place, I believe many otherwise hopeless cases may be practically cured. The formation of fluid in the pleural cavity is the most serious complication that can occur. If it remains serous it may be absorbed, but there is a great tendency for it to become purulent and it is then an important factor directly or indirectly in causing death.

My next case is one of acute pulmonary abscess which I report, 1st, to call attention to the wisdom of treating such cases with artificial pneumothorax; 2nd to call attention to the frequency of such cases; 3rd, to illustrate the efficiency of lung collapse in controlling severe pulmonary hemorrhage.

M. D. C., age 44 years. In good health until June 1918, when he developed antrum disease. Was operated upon June 30, under local anaesthesia. On July 19, was operated again with ether anaesthesia. The next day he began to cough a good deal but without expectoration. About September 10, he developed what was called pleuropneumonia, and a week later began to expectorate. The first day he raised about 8 ozs. of foul purulent sputum. His

two-hour temperature record for several days was from 98 to 99 2-5. Pulse normal. He had lost only 10 pounds in weight. His history and physical signs suggested an abscess in the lower lobe of the left lung which was confirmed by an X-ray picture. He now began to have severe pulmonary hemorrhages about once a day, varying from 6 to 12 ozs. in amount, and after trying for a week to control these with medical treatment at the Blodgett Hospital, I began artificial pneumothorax. He had no more hemorrhages after the first gas treatment and within two weeks his sputum had diminished to 2 ozs. a day. Two months later he coughed up a piece of bone about as large as a pea. Cough and expectoration rapidly diminished and in the course of 3 or 4 months had practically disappeared. I kept his lung collapsed 6 months, after which it was allowed to re-expand, and he has since been in perfect health.

About one-fourth of all deaths following surgical operations are said to be due to pulmonary complications and of these pneumonia is the most frequent, being due to the irritation of the respiratory tract by the anaesthetic, or the aspiration of infectious material during operations on the teeth, sinuses, nose or tonsils, or the carrying of a septic embolus by the blood vessels to the lung from the site of operation. When calling the attention of a surgeon to the frequency of complications after operations in the upper respiratory passages, he said he had never seen any after 4,000 tonsillectomies. Within 6 months, following tonsillectomy by this same man, I saw a case of acute pulmonary abscess ending in recovery, and one of acute tuberculosis ending in death in a young woman with incipient tuberculosis, whom I had strongly advised against taking a general anaesthetic for the purpose of having her tonsils removed.

In typical cases of lung abscess there is a history of sudden expectoration of a large amount of pus after which the physical signs of cavity may be found, and the symptoms immediately improve. This sudden expectoration of a considerable amount of pus is the most characteristic single symptom of pulmonary abscess. There may or may not be an explosive cough. The breath and sputum usually have a foul odor. Elastic tissue may or may not be present in the sputum, but to be diagnostic of a pulmonary origin it must be of an aveolor arrangement. If tubercle bacilli are not found in such sputum the case is probably not tuberculous.

The commonest and often the only physical sign is dullness. The most frequent location is in the lower lobe. Signs of cavity are rarely found. In some cases there are almost no signs at all and the diagnosis must be made from the symptoms and X-ray evidence which usually consists of a dense shadow at the site of the abscess. Before

taking an X-ray picture the cavity should be evacuated by coughing and the picture taken in the upright position to demonstrate a fluid level in the cavity. A picture should be taken both before and after coughing.

Walker has shown that the mortality of medically treated cases is 54%, the surgical mortality 25 to 30%. Lord states that 75% die if not operated upon; 18% become more or less chronic invalids; and 7% recover, the latter being mild cases of short duration.

Medical treatment, postural rest, etc., is unsatisfactory, and many surgeons believe that the only effective treatment is surgery. Incision and drainage are suitable only for single abscesses and those easily reached. In multiple abscesses surgery is usually not productive of good results as it is impossible to evacuate all of the cavities. Moreover the operation as stated is a dangerous one. Mild cases with sepsis, chills, fever, etc., may be watched for three or four weeks and if not then improving the patient should be operated upon or lung compression instituted.

Artificial pneumothorax in the treatment of these cases was first used in this country in 1917 by Tewksbury, since which time a considerable number of cases treated in this manner have been reported by different operators with, on the whole, most favorable results. The more recent the abscess, while its walls are soft and compressible, the more favorable the prognosis, and I believe that in all acute pulmonary abscesses, lung compression should be used as soon as it is evident the patient is not going to recover spontaneously. Thoracotomy and thoracoplasty should be reserved for cases in which artificial pneumothorax has failed to compress and obliterate the cavities.

As illustrated in two of the above cases the only really efficient treatment for severe pulmonary hemorrhage is artificial pneumothorax which acts as a hemostatic by compressing the bleeding lung. It is true that patients seldom die directly from pulmonary hemorrhages, but when profuse and frequently repeated they weaken the patient, destroy his morale, lead to bronchopneumonia and greatly lessen the chances of recovery. Such cases are often amenable to lung compression with very gratifying results as I have found in ten cases treated in this manner in the last seven years. If the case is bilateral, compression may be discontinued when the bleeding is controlled, otherwise it may be continued for curative purposes.

ABDOMINAL PAIN RELIEVED BY THE REMOVAL OF AN APPARENTLY HEALTHY APPENDIX

A Review of Recent Literature, with One Illustrating Case.

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DETROIT, MICH

CASE REPORT

Gladys C. Age 14, schoolgirl. This patient came to the Outpatient Department of the Harper Hospital on October 25, 1920, complaining of pain in the right lower quadrant. The pain had lasted about one month and was severe enough to keep the patient from her school work. A physician advised her to remain in bed and keep an icebag over the painful area. This she did and noticed some improvement during the treatment, but as soon as she got up and about the pain returned. She told us that she was suffering from nausea and headaches at times but that she never had vomited. She also presented a ready-made diagnosis of appendicitis. On physical examination she presented nothing abnormal except tenderness on pressure over McBurney's point. Her temperature, pulse and respirations were normal during the period of observation. The usual laboratory tests, including X-ray, failed to confirm our clinical diagnosis of appendicitis (chronic). After consultation, we decided that an exploratory laparotomy was justifiable. On Nov. 6 the patient was operated on by Dr. Walter Vaughan, who reported a perfectly healthy appendix; no adhesions were found. No sections were made. The convalescence was uneventful. Three months after the operation this patient presented herself at the clinic at my request and stated that she was "perfectly well." We thought it better judgment to operate in this case and find a normal appendix than by taking chances by not operating. We may add that Dr. B. Jones stated that after an examination he found no evidence of a psycho-neurotic element in this patient.

Dr. Richard Cabot reports a parallel case in a schoolgirl of 17 years of age. She came like Gladys with a ready-made diagnosis of appendicitis. The illness was of about one month's duration. That patient also came to operation. "An appendix bent upon itself and covered by old adhesions, but not inflamed," was the report.

In making a diagnosis of chronic appendicitis most writers agree upon one point at least, namely, that pain on deep pressure over McBurney's point is always present. Others state that the syndrome of constipation, lack of ambition, general weakness plus pain on deep pressure over McBurney's point are the necessary positive findings in order to make such diagnosis justifiable. Dr. Hugh Cabot in a recent paper sounds a warning against making a diagnosis of chronic appendicitis without sufficient evidence at hand. He further states that too many operations are performed for so-called chronic appendicitis without any results worthy of being called beneficial to the pa-

tient. In fact, many patients already suffering from general weakness who are subjected to a laparotomy and the removal of an apparently healthy appendix are thereby turned from bad to worse. The question of what constitutes a chronically inflamed appendix seems also to be far from settled and we might well ask ourselves whether or not an appendix which can be diagnosed as diseased only by the microscopist would be capable of producing clinical manifestations of disease. In differential diagnosis it is well to remember that the pain, when subjective, bears no relation to meals ingested, while in gastric and duodenal ulcer the pain comes on at regular intervals after meals.

Concerning Perityphlitis, Howard Kelly states that such a term is a misnomer, also "that no case can be accepted as one of primary disease of the cecum in which it is not definitely stated that the appendix was examined and found healthy."

How are we to find an explanation of such phenomena as the removal of a healthy appendix followed by cessation of the symptoms. Or the removal of an organ, the pathology of which is doubtful, followed by no improvement. Dr. Edwin Beer of New York, when recently questioned, suggested that the cecum might be redundant thus causing symptoms of pain which disappeared with the removal of the appendix and due to a slight fixation of the redundant cecum by adhesions (post-operative).

I am going to offer an explanation in the form of a theory brought forward by Dr. Geo. Waugh of London, England, and more fully described by him in the *British Journal of Surgery*, Vol. 7, 1919 and 1920. His theories, born out by much clinical experience, plus a thorough anatomical, embryological and physiological study, seem worthy of being better known. This authority believes that the overabundance of pathology or symptoms of pathology in the right lower quadrant as compared to other parts of the abdomen, can possibly be explained by an abnormal mobility of the ascending colon. He acknowledges Sir Lane as the pioneer in this work by the "kinks" and "angulations" theories but goes further than that authority. He further states that in spite of patient and brilliant research upon animals no investigations have so far been able to throw much light upon the human problem, or to add much, from the knowledge thus gained, to the successful treatment of these diseases in human beings. He then asks:

1. Why are all these diseases grouped together in one small area of the abdominal cavity?

2. Why are they almost unknown in childhood?

3. Why does their onset occur so frequently about the age of adolescence and unwards?

4. Why are gastric ulcers clustered around the pyloric region of the stomach, and why is it that duodenal ulcers are almost always in the first and second parts of the duodenum?

5. What are the prodromal stages of gallstones, gastric ulcers and duodenal ulcers?

6. Why is the right kidney so frequently mobile in these diseases, and why is it the only mobile one in 80% of all cases of movable kidney?

7. Why does the right kidney so frequently prolapse again after very firm surgical anchorage?

MECHANICAL FACTOR

Ulcers in most parts of the body are formed, usually, under the influence of some recognizable mechanical factor and healing occurs only when the recognized irritant has been removed. The mechanical factor that leads to focal ulceration of the stomach and duodenum, to the stagnation of bile, and to the mobility of the right kidney, may be provided by the presence of a mobile ascending colon. Anatomically he relates how the hepatic flexure of the colon lies in intimate relation with the pyloric end of the stomach, the gall-bladder and the cystic duct, as well as the second and third portions of the duodenum. The firm fixation of the ascending colon is a prime necessity for the efficient performance of its function.

In order to have a clear view of the theories brought forward it is necessary to briefly review some fundamentals in what is generally accepted as normal in the anatomy of the colon. The ascending colon is retained in contact with the posterior wall of the abdomen by the peritoneum which covers its anterior surface and sides, its posterior surface is connected by loose areolar tissue with the quadratus lumborum muscle and with the front of the lower and outer part of the right kidney. Sometimes the peritoneum almost completely invests it, and forms a distinct but short mesocolon. The descending colon occupies a similar position on the left side and is covered by the peritoneum in a similar manner. But it is more frequently covered by peritoneum on its posterior surface than the ascending colon.

EMBRYOLOGY OF THE PERITONEUM AND THE ALIMENTARY TRACT

The stomach and intestine with their mesenteries undergo changes of position determined by several growth factors, such as the elongation of the intestine, and the development of such organs as the liver, pancreas and spleen. Such developmental changes, with the subsequent displacements, adhesions and absorptions serve to form all the mesenteries, omental and peritoneal

folds of the adult, so that while in the primitive condition the intestinal tube is suspended by a dorsal mesentery and freely movable, certain portions of it become later by secondary adhesions, firmly connected with the parietes (retroperitoneal) or with other portions of the tract. Occasionally the descending, more rarely the ascending mesocolon persists so that the bowel is more or less movable in these divisions.

Treves examined carefully one hundred subjects and reported the following. In 52 there was neither ascending nor descending mesocolon. In 22 there was a descending mesocolon but no trace of a mesocolon on the ascending side. In 14 subjects there was a mesocolon to both the ascending and descending segments of the colon. In the remaining, 12, there was an ascending mesocolon but no corresponding fold on the opposite side. We may, therefore, expect to find a mesocolon in 36% of subjects on the descending side, while on the right or ascending side in 26%.

It seems that these findings would be of great importance in explaining the bizarre position which is sometimes occupied by certain parts of the colon. In fact, Dr. Mills of St. Louis states that "a single type of visceral anatomy and physiology is impossible."

Dr. Waugh speaks of the ascending colon as that part of the large intestine which is included between the lowest part of the cecum and the highest point of the hepatic flexure, in discussing its function or pathology. With the exception of the cecum it should be firmly plastered to the posterior abdominal wall. The abdominal mobility of this part of the gut leads to displacements and abnormal positions of it, accompanied by drags and pulls on other important organs with which it lies in close relation.

FUNCTION OF THE ASCENDING COLON

It has a unique function. (It is the only segment of the gut throughout the alimentary tract that has to support semi-solid material against the action of gravity and to drive it vertically uphill.) Elsewhere the contents are fluid or their path is either obliquely horizontal or down hill. Only a fixed segment of gut can give mechanical efficiency in the performance of its normal function. The weight, both of the gut itself and its load is then distributed sideways through its broad lateral attachments and its normal functions can be carried out without any shifting of position. But with the persistence of its mesentery or part of it, the gut must sag until the mesentery is taut,

and as the gut receives its normal load, so will the tautness of the mesentery increase. Further, the peristaltic wave starting in its lowest segment will expand its energy partly on the mobile segment of the gut immediately above it and partly upon its contents instead of entirely upon its contents as it would if the gut were fixed. The whole strain exerted by the weight of the gut and its contents is now concentrated along the narrow linear attachment of its primitive mesentery posteriorly, and the tendency to progressive overloading is established through the wasteful expenditure of the wave of peristalsis in moving the gut as well as its load. A fixed, not a mobile viscus, is necessary for carrying on its normal function.

As the gut reaches its full size at adolescence, it then contains its heaviest load, explaining the appearance of symptoms at that time. There occurs no proportionate strengthening of its mesentery, only an increase in the fat deposits between its layers which in itself is not capable of much assistance in increasing the mechanical efficiency of supporting a segment of gut.

In childhood the gut is small and so is its load and disabilities, resulting from a mobile ascending colon, are apt to be obscure and masked. A large number of patients give a history of a perfectly healthy childhood and early adolescence. On the other hand, a few had suffered from vague digestive disorders in childhood. These were never properly diagnosed but a variety of treatments were bestowed upon them.

The local effects felt earliest are on the right kidney, the duodenum, gall-bladder, pyloric region of the stomach, later in more remote regions as the liver, cardiac end of the stomach and even the left kidney. A general prolapse of all the viscera of the abdomen can thus be represented as an orderly process due to the physical stress entailed by the attempt of the growing ascending colon to sustain its own weight and an ever increasing load upon its mesentery.

Of all mobile kidneys the right is mobile in 80% of cases, 15% are bilateral. Surgical operations for the purpose of fixation of mobile kidneys do not deal with the force that has brought about the prolapse and are, therefore, generally unsuccessful. This is directly due to the fact that the full weight of the gut with its load is distributed along the narrow line of the posterior attachment of the mesentery instead of being dispersed over a broad area sideways, as when no mesentery is present. The mobility and capac-

ity for prolapse of the hepatic flexure of the colon have an important influence on the position and direction of the transverse colon and consequently upon the path of its contents. As the hepatic flexure slides down to below the level of the iliac crest the direction of the transverse colon will be a slooping vertical one on the right side, with a resulting long, steep, vertical drive for semi-solid material ascending toward the splenic flexure. On account of its firm anchorage by means of the costo-colic ligament, the splenic flexure seldom prolapses.

The result of this condition, a mobile ascending colon, may be divided into several types; the gastric, duodenal, biliary, renal and the right iliac fossa types, in accordance with the localization of the pain. In the right iliac fossa type, the one with which we are principally concerned, the salient feature is chronic pain in the right iliac fossa plus dyspeptic symptoms. The onset usually begins at adolescence and is generally described by the individual as "indigestion." This "indigestion" cannot usually be explained by indiscretions in diet, bad habits of life, or unsuitable environment. No change from any of the supposed causes are able to bring relief. The pain may remain present for several days diffused over the right iliac fossa. It appears to be a sensation experienced from a chronically overdistended segment of gut to which the element of dragging is added. Many of these patients also give a history of mucous colitis and Dr. Waugh relates a specific case of seven years' duration which was cured by fixation of the ascending colon. Many patients present themselves with these pains after a perfectly healthy appendix has been removed (68 out of the 180 cases here reviewed) and are relieved only after a second laparotomy with fixation of the ascending colon.

Due to the irregularity in the appearance of the symptoms, directly caused by the strain of a mobile ascending colon, many of these patients are classified as "neurotics" or "neurasthenics." In children the condition is generally regarded as "chronic appendicitis" or "dyspepsia." Pain, not very severe, of different length of duration is complained of in the right iliac fossa. It is intermittent in character and examination of the abdomen seldom reveals any obvious explanation for its presence. There is no real tenderness, no real muscular rigidity, but a full ascending colon can be detected when carefully sought for. Vomiting seldom occurs, but nausea and lack of appetite are in-

variably present. The patient is clearly very ill and in the absence of guiding signs in the region where the symptoms are experienced one is easily led to a panicky removal of a healthy appendix. Careful palpation of the outline of the ascending colon will reveal that it is overdistended; this can then be confirmed by X-ray.

Out of more than 100 children operated on (not included in this series) who were under 12 years of age, a persistent mesentery of the ascending colon were confirmed at operation. Only in seven, out of these hundred cases, was the appendix found to be diseased; in the remainder it appeared to be healthy in every respect.

Dr. Waugh gives a detailed analysis of 180 cases operated upon by himself. In all of these cases, besides the removal of an often healthy appendix, a fixation of the ascending colon was performed. These cases were followed up from a few months to six years and the results were uniformly satisfactory. Out of 112 cases, who upon operation were found to still have their appendix intact, only 9 were found to be diseased. In those cases where the appendix was classed as healthy, it was small and infantile in appearance, and even the most skeptical would probably have agreed that its mere removal could not have in any way modified the patient's symptoms.

On examination of these patients it is important to notice the fullness of the cecum and the ascending colon and to the variation of position of the right kidney. This varies from a slight increased mobility and palpability to a gross prolapse. X-ray will further show the malposition of the ascending colon as judged by the position of the hepatic flexure.

CONCLUSIONS

Would it not be possible by these observations to find a clue to many hitherto obscure conditions of the abdomen, which, due to their unknown etiology have defied all sorts of treatments, mostly speculative. Besides the types already mentioned it is probably safe to include enteroptosis and chronic intestinal stasis. We also believe that further observations along these lines may bring about remarkable therapeutic results by finding and correcting malformations, for the purpose of restoring the normal function of an organ which has been handicapped in the performance of its intended function. This malformation is congenital, it is present in a certain percentage of all individuals and due, no doubt, to certain developmental and evolutionary

changes to which the human specie is subjected.

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IN THE FINAL ANALYSIS IS LANE'S KINK REALLY A TROUBLE MAKER, OR HAS IT A LIFE SAVING FUNCTION?*

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Although Lane's Kink as a cause of intestinal stasis has ceased to be a subject of very active discussion, the attention that was directed to it a few years ago, and the constant reiteration that it was an abnormal condition giving rise to serious ill health, have left impressions that are slow in being erased. That the condition is probably a normal one has not been advanced as often and as clearly as I believe it should be, and that it may have a distinct purpose has, as far as I know, never been presented.**

In the last year I have seen four cases of intussusception, three of these were of the ileocecal type—that is to say—the ileum had invaginated into the caecum. The fourth was of the enteric type, small bowel into small bowel. In each of the three cases of the former type, the mesentery of the ileum was very long. This allows increased range of motion of the intestine, and, therefore, is rightly regarded as a predisposing cause of intussusception. It is hardly conceivable that the ileum could invaginate if held by a short mesentery. May we not argue then, that if these infants had possessed a short mesentery at the lower end of the ileum, or in other words, a condition which is occasionally found in adult life, and has repeatedly been described as Lane's Kink, that this catastrophe would have been averted. Moreover, is it not probable that Lane's Kink has been unjustly denounced? Should it not be credited rather with having a distinct life saving function?

After reduction of an intussusception of the ileocecal type, to prevent recurrence, we either suture the lower end of the ileum parallel to the caecum for a short distance, or anchor the intussusceptum by a few stitches through the mesentery to the posterior layer of the peritoneum—in the latter procedure we deliberately produce what is practically a Lane's Kink.

Intussusception occurs most frequently in infants. Power has pointed out that the proportion of the length of the mesentery to the length of the body is relatively greater in infants than in the adult, and may this not account, in a measure at least, for the relatively greater frequency of intussusception in the former?

Very recently one of my colleagues operated a case of intussusception of the ileocecal type in an adult. In another room we were operating upon a

patient who had a short mesentery and a band which produced what has been described as Lane's Kink. I believe we were able to demonstrate to the satisfaction of everyone present that it would absolutely prevent an accident such as the patient in the adjoining room presented. With such an object lesson before us, it is needless to say that we did not disturb matters, but left the "kink" as it was.

I think we might properly ask the question—"Is it not the purpose of a Lane's Kink to prevent an intussusception?"

AN IMPROVED GASTRO-DUODENAL TUBE

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With the advent of study of the duodenal contents, particularly the pancreatic ferments, the writer in 1912 devised and used successfully a modification of the Jutte gastro-duodenal tube. More recently, since the publications of Lyons, Smithies, etc., on bile studies and non-surgical drainage of the biliary tract, this same tube has been found more satisfactory than any of the other numerous forms.

A good gastro-duodenal tube and tip must meet the following requirements. (1) The tip must be heavy enough that it will readily sink to the most dependent part of the stomach. (2) The tip must be small enough and so shaped to easily pass through the pylorus forward or backward. (3) The openings at the tip must be as large as the lumen of the tube. (4) Any connections should have a lumen as large as that of the tube. (5) The tube wall should be stiff enough that it will not collapse on suction, or buckle when the tip meets resistance. (6) The tube should be marked at proper places so that one can readily tell how far it has traversed the gastro-intestinal tract. (7) The whole tube should be long enough that it may hang over the side of bed or couch and drain by siphonage when desired. None of the forms of the gastro-duodenal tube thus far described in the literature, meet these requirements. The Einhorn tip is too light and the holes too small. It is also an expensive tip to manufacture. The Jutte tip is too light and the holes too small. The Rehfus, Lyons, and Palefski tips are heavy enough and have large openings but are too large to readily pass the pylorus, especially in those cases with a certain amount of pylorospasm.

The tip which the writer uses is olive shaped, made of solid metal, nickel plated. It is $1\frac{1}{4}$ cm. long; $\frac{3}{4}$ cm. in diameter and weighs 5 gms. It is connected with fairly rigid rubber tubing $\frac{1}{4}$ mm. in diameter, in the usual manner. Its total length is about 135 cm. The openings are made in the tube itself. They are oval in shape, parallel with the tube and not opposite to each other so that the tube is not easily buckled at this point. Four holes of this character are sufficient and are placed within 4 cm. of the metal tip.

The tube is marked with a single line at 50 cm. (20 in.) which is about 10 cm. beyond the cardia of the average person. It is again marked with a double line at 75 cm., which is about 10 cm. beyond the pylorus. Another single mark is placed at 85 cm. so that one can readily tell the length of tube in the patient in case it is desired to pass it beyond the 75 cm. mark.

Directions for passing tube: The patient is seated, told that the tip is to be swallowed, cannot be pushed and that as soon as it is beyond the larynx there will be no retching or gagging. With very nervous patients and those who vomit easily, sen-

*Read before the Kalamazoo Academy of Medicine, October, 1920.

**Since this paper was read reference for this idea has been made by Morley, Brit. M. J. 1920, II, p. 542. Abstracted, Int. Abst. Surg. March 1921, p. 196.

sitivity of the throat can be lessened by spraying with 5% cocaine. With the patient's head back and mouth open, place the tip over the back of the tongue, depressing it with the finger if necessary, then bring patient's head forward and instruct him to swallow vigorously until the tip is engaged. At this point the patient is instructed to breathe deeply and regularly through the mouth, to take his time and swallow, without biting the tube, until the desired length has been introduced.

If it is only desired to aspirate the stomach contents, allow the tube to pass to just beyond the first mark, or at the place where the contents are most easily obtained.

For duodenal intubation pass tube to first mark, wash stomach till contents return clear, slightly withdraw the tube, and have patient lie on right side. Then slowly swallow tube to the double mark (75 cm.). This 25 cm. should not be swallowed faster than about 1 cm. per minute. For patients with extra long or short chests allowance should be made in the length of tube passed.

Position of the tip. This can be ascertained by a number of signs. (1) When the tube is still in the stomach, the aspirated material is positive for free HCL. by the dimethylamido-azo-benzol or Congo red test (unless there is achylia). When the tip has passed to the duodenum free HCL. is negative. (2) The presence of bile in the aspirated material is suggestive that the tip is in the duodenum, yet this test cannot be relied upon as bile is often regurgitated into the stomach, especially when gastro-intestinal pathology is present. (3) Allow patient to drink a half glass of water and if the tip is in the stomach this clear water can be aspirated immediately, but if in duodenum little or no water is obtained. (4) Slowly with a syringe inject a little air through the tube, at the same time listening over the epigastrium with the stethoscope. If the tip is in the stomach the maximum gurgle is heard over the epigastrium and to the upper left, while if the tip is in the duodenum the gurgle is loudest to the right and down. (5) X-Ray. If a fluoroscope is handy, one can easily see the position of the tip.

IT MUST BE MADE RIGHT FROM THE START

Norway is best known for her midnight sun and her immense harvests of the deep. Nature has nowhere been so prodigal in providing ideal conditions for the spawning, feeding and development of the True *Gadus Morrhuae*, than in the waters surrounding the far-famed Lofoten Islands, Norway. For a century or more, cod liver oil has been recognized as a dependable and easily absorbed nutrient and more recent investigations reveal that it is an exceedingly fruitful source of the anti-rachitic vitamins. Cod liver oil to be utilized to fullest extent by the system should be pure and sweet and free from admixture with inferior non-cod oils and also free from admixture with blood and gall—due to careless and unscientific handling of the livers. Cod liver oil is as delicate as butter and in the selection and processing of the livers, should receive as much care as science has thrown around the production of pure milk. It must be made right from the start. For nearly half a century the producers of the "S & B Process" Clear Norwegian Cod Liver Oil have concentrated their endeavors

and specialized upon the product of the livers of the True *Gradus Morrhuae*. Never satisfied with the quality of oils offered on the market, several years ago Scott & Bowne established their own cod liver oil plants in Balstad, (Lofoten) Norway, where under most exacting, modern scientific and hygienic conditions, the "S & B Process" is produced. This high grade oil is then brought over seas in special containers to be refined in the unique S & B laboratories in America. The "S & B Process" is the only cod liver oil made in Norway and refined in America. This oil is guaranteed a 100 per cent product of the livers of the True *Garus Morrhuae* and absolutely free from admixture with other oils or impurities. Physicians may prescribe the "S & B Process" with an assurance that his patient will always receive the nutrient and vitamic virtues of cod liver oil in truest form. We are reliably informed that liberal samples of this high grade medicinal cod liver oil will be sent to physicians on request. The address is Scott & Bowne, Bloomfield, N. J.

COUNCIL REMEDIES

One of the most important developments in the medical history of the past five years has been the work of the Council on Pharmacy and Chemistry of the American Medical Association. Their examination and analysis of newer remedies has done much to advance the standard of manufacturing pharmaceuticals, and indicating those for which misleading claims are made.

The co-operation of the doctor in using and prescribing council-passed products is making this work more effective each year. The co-operation of the manufacturers is, also, an encouraging recognition of the value of this service. A partial list of the council-passed remedies, manufactured by the Abbott Laboratories, Chicago, appears in this issue. These are obtainable on prescription at the leading pharmacies, or may be obtained direct, as desired.

The effect of fruit juices in the mouth is now quite clearly understood. The common expression that a taste of orange or apple makes one's mouth water means that these mildly acidic fruit juices have the peculiar power to stimulate salivary flow.

More than that, it means that the saliva which responds to this stimulation is frequently more normal than was found in the same mouth during the pre-stimulated period. This is one of the chief reasons why fruit should form a part of each meal, why each meal should open and likewise close with fruit.

It produces a copious, fluid, alkaline saliva, which is so essential in order that the oral cavity may function properly.

Latterly various investigators have found that sialin nature in maintaining a normal saliva. They have, moreover, proven that alkaline mouth preparations are contra-indicated in the mouth and should be abandoned because they oppose nature in maintaining normal oral secretions.

The most universally used acid dentifrice is Peppodent. It is indorsed by many in the professions and used daily by millions because it stimulates dentifrices should be mildly acidic like fruit to as salivary flow in manner similar to fruit.

The Journal

OF THE

Michigan State Medical Society

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Editorials

HISTORICAL DETAILS OF OUR SOCIETY

For several years we have felt that there were some discrepancies in regard to the facts surrounding the early history of our State Society. It had ever seemed strange to us that the profession of this state had been apparently organized for a comparatively brief period of time—56 years—when the societies of surrounding states were past their century marks. We had determined upon several occasions to institute a search into past history with the hope that we would be able to find some reason for our juvenility. This determination was never pursued for one reason or another.

At our so-called 50th Annual meeting, Dr. Peterson, in his presidential address, reviewed our history as depicted by the lives and labors of our past presidents. Nothing was said in his address about earlier historical facts and so we gained the impression that our records as revealed today were correct and that we were certainly juniors in the world of medical organizations of State So-

cieties. Recently we were again reflecting upon the reasons why there had been no medical organization previous to the Civil War. The question of "How old is Anne?" insofar as it pertained to our Society annoyed us considerably because we felt certain that we were in part misrepresenting our age. A search was undertaken and the following facts revealed in that search is submitted to our members for their consideration. The data is secured from the Transactions of The State Medical Society commencing with the oldest volume in our possession and running through the first issues of Volume One of The Journal.

In 1870, Dr. Richard Inglis delivered the Presidential Address. He reviews the history of the Society and the following is quoted from that address:

"On the 14th of June, 1819, an act to incorporate Medical Societies for the purpose of regulating the practice of medicine and surgery, was adopted and signed by the Governor, Lewis Cass.

"The preamble of that act says: 'Whereas, Well regulated medical societies have been found to contribute to the advancement and diffusion of true science, and particularly the healing art, Therefore, Be it enacted, etc.' Such was the estimation in which our profession was held by the legislators in those early days. The Act provided for the establishment of the Medical Society of the State of Michigan, and also for county societies.

"In accordance with the act, the First Medical Society of Michigan was organized on the 10th of August, 1819. Dr. Wm. Brown was elected president."

The above fact as revealed in our records demonstrates clearly in our mind that in place of having an organizational history of only 56 years we are in reality an organization that has existed One Hundred and Two Years. This is substantiated in the further perusal and study of the early records that are available. How the discrepancy between 102 years and 56 years occurs we will later demonstrate by quoting from these same official documents. First, however, we wish to point out the years of existence of certain of our County Societies, in order that they may likewise receive information as to their age.

The following is obtained from the records:

On June 12, 1827, permission was granted to Drs. Nichols, Pomeroy, Kitteridge and Lord to form a Washtenaw County Medical Society.

On June 12, 1831, permission was granted

Drs. Thompson, Porter, Parke and T. Thompson to form an Oakland County Medical Society.

On July 23, 1835, Drs. Loomis and Hubbell and others were permitted to form the St. Joseph Medical Society.

In January, 1836, Dr. L. T. Jenney was authorized to form the Macomb County Medical Society.

In January, 1836, the Monroe County Society was authorized.

In June, 1837, Drs. Littlefield, Alden, Randall, Noneclott and Caulkins were authorized to form the Branch County Medical Society.

Although we cannot find record of the exact date of organization of the Wayne County Medical Society, still we do find this: "April 14, 1849, we learn that the Censors of that society reported that Edmund Andrews is entitled to be received as a student of medicine by any member of the Wayne County Medical Society." We are justified to conclude that the Wayne County Medical Society was duly authorized.

From the above it will be seen that previous to 1850 there were at least seven authorized county medical societies that were component units of the Michigan State Medical Society.

As the search progressed we read that in 1851 the law that established the state medical society was repealed by the legislature and the society held its last meeting on January 14, 1851. During the period of its existence the membership had grown to 63 and the reason explaining this apparently small membership was that the yearly accessions were limited to two members. The annual dues were \$5.00 and a fine of \$1.00 for failure to attend the semi-annual meetings. The Society's first officers were: President, Wm. Brown; Vice President, Stephen C. Henty; Secretary, John L. Whiting; Treasurer, Randall S. Rice; Censors, E. Hurd, S. C. Henry and R. S. Rice. At the time of organization there were but eight doctors in Detroit. In the 32 years there were but seven presidents. The officers served or were re-elected for a number of years. Of the secretaries there were four. J. L. Whiting, 11 years; R. S. Rice, seven years; E. M. Cowles, one, and J. B. Scovil, 14 years in office.

Dr. William Beaumont, of Mackinac was elected to membership on June 14, 1825 and on August 27, 1826 he gave the society his celebrated report of his case of gastric fistula and his clinical and chemical studies of digestion, etc. In 1900, our society erected

a monument in his honor and memory on Mackinac Island.

Thus did the first period of our Society terminate. Much more that is interesting is found in the records but this editorial will not permit their publication.

On March 30, 1853 the organization was again revived at a meeting held in Ann Arbor, and Dr. George Landon was elected as president. The eighth meeting of that reorganization was held also in Ann Arbor as an adjourned meeting of one held in Coldwater, January 18, 1860, but there were so few members in attendance, the financial earthquake, the Civil War, all induced such a spirit of discouragement that the society was disbanded March 29, 1860. The total membership was 115.

The third evolution period of our Society began in 1866 when 100 doctors from all parts of the state met in convention for the purpose of organizing a State Medical Society. The organization was perfected and the first annual meeting was held in Detroit that year, the next was also in Detroit, the third in Lansing, the fourth in Kalamazoo and the fifth in Grand Rapids. The records from 1866 are intact and the organizational activities are well and clearly recorded. They are in our files and will so be preserved.

It thus becomes apparent that at present we are in the 56th year of this third reorganization and in the 102nd year of our first organization.

Two questions naturally inject themselves after one has delved into these records; Should we designate the years of our organization from the year 1819 or, is our present designation of the years of our organization the proper one? This is a question we feel should be solved by our Society at its next annual meeting. In the meantime we would welcome comments and suggestions. One thing is certain and that is that the organization has been known as the Michigan State Medical Society since 1819.

We also feel that it is desirable and that the work should be undertaken to carefully compile a complete medical history of the organization from the year 1819. The records available in our hands are not complete. We glean from our reading that there is in possession of Drs. C. G. Jennings, Duffield and Connors' records and papers of the early history of medical affairs in Michigan. Reference is made to them in several places. In 1913, Alpheus Jennings of Detroit prepared some of the extracts of the minutes of meetings held in the early 1820's and they

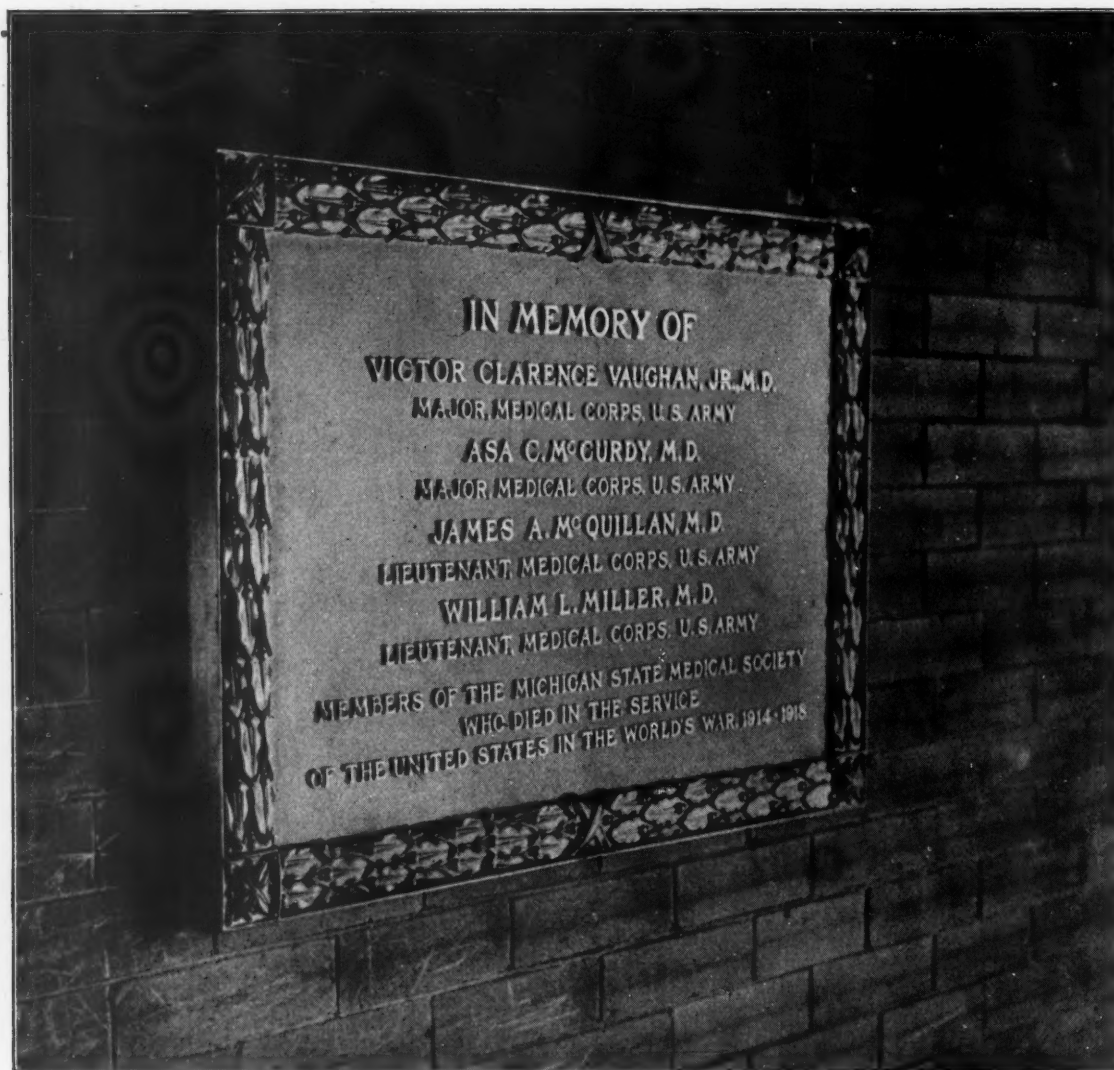
were published in The Journal of 1913. They are not completed records. Undoubtedly there may be other sources through which a Historical Committee might uncover additional information. On the whole we believe that such a detailed history brought up to our present date would be of inestimable value and interest to our members.

ARMISTICE DAY—TWO MINUTES

As the body of an "Unknown Soldier" is being buried in Arlington Cemetery with

the Supreme Sacrifice during the World's War.

We are sure that the contribution of these two minutes from pursuit of our activities is little enough indeed to contribute to perpetuate the memory of these, Our Dead. We are sure that in doing so we are reconsecrating again the life they gave. We are sure that in thus perpetuating their memory we are once more reaffirming our allegiance to our flag and the nation under which we are privileged to pursue our vocations and which vouchsafes our freedom. We are sure that there can exist no excuse



all the honor, glory and ceremony that can be accorded by our representatives of the army, navy and executive officers, President Harding asks that all citizens pause in their activities from 12:00 to 12:02 noon on November 11. The President's request is that during these two minutes we uncover and with bowed head stand in reverence of, and in tribute to, those who made

for failure to not comply with President Harding's request.

Two years ago our State Society caused to be prepared a tablet that contained the names of the members of our society who gave their lives in the service of their Country. This tablet has been placed upon the walls of the Medical Building of the University at Ann Arbor. Arrangements have

been made whereby a proper wreath will be placed above this tablet on Armistice Day. While we may not be able to be in Ann Arbor on that day, shall we not during those two minutes of silent tribute recall in reverence these four of our number whose names remain upon the muster roll of our Nation's Dead?

DIAGNOSTIC CLINICS

That there is gradually, and at times with startling features, a changing relationship between the profession and the public being evolved is becoming more and more apparent. That this change is bringing about similar changes in our erstwhile relationship to one and another is likewise becoming apparent. Whether the proper solution is being sought, or, whether we are creating a state of more or less chaos from which the eventual solution will be evolved we do not at this time feel inclined to express opinion. Whether or not the combination and proposition of certain groups and their pursuit of organized activity to the exclusion of and conceivable detriment to other isolated individuals or groups is inductive to united effort in quest for a new standard, we again refrain from making a definite pronouncement as to the propriety of such a movement. We cannot help but view these new undertakings with some misgiving while at the same time we conjecture as to their final outcome and how they will affect our individual and combined futures. We have endeavored and shall continue to endeavor to express impartial comments upon all such movements that originate in our midst. The comments that we do make are advanced solely in the spirit of provoking wide-spread consideration of these problems, thereby evoking the deliberate judgment and recommendations of the entire profession. We do not propose or hold that such of our observations as are thus expressed are final or representative. Neither are they intended to reflect upon the integrity or sincerity of those who are sponsors for these newer propositions and methods. We are endeavoring only to raise pertinent questions pro and con.

During the past month a new feature has been injected into the profession's communal progress that bids well to markedly alter our individual relationship with the public and which at first glance threatens to seriously affect the individual doctor. Grace Hospital and Harper Hospital, both of Detroit, have made wide-spread announcement to the profession of their Diagnostic Clin-

ics and the rules under which these Clinics will be conducted. Shortly after the announcement made by these two hospitals we were in receipt of a third and fourth announcement of a similar Clinic at Butterworth Hospital in Grand Rapids and at the Battle Creek Sanitarium. We anticipate that like announcements will be forthcoming from other hospitals in other parts of our state. How shall we interpret this movement?

At first the thought occurs that these hospitals mentioned and finally all similar Hospital Diagnostic Clinics at once enter into direct competition with the individual doctor. That the relatively few doctors composing the staffs of these hospitals have combined, and are exerting their combined professional influence and skill, together with their institution's prestige to secure public patronage with the resultant pecuniary returns that naturally must follow. That the doctor, who is not connected with these staffs, is at once confronted with a most formidable array of organized competitors who possess advantages that he cannot hope singly to acquire. How far this first thought objection will hold true we cannot state. While it is now announced that only referred cases will be received, we can readily perceive that but one small step further would accomplish the admittance of any patient that might apply. The announcement is very indefinite in that respect. A precedent is not permanently established.

The teachings and tendencies of practice for sometime past have been directed toward inculcating the need of making more accurate and positive diagnoses. It is continuously being pointed out that tentative diagnoses, with watchful waiting therapy, is not conducive to reduced mortality rates or morbidity—and rightly so. Methods have been developed whereby greater accuracy in diagnosis may be attained. These methods have become more and more numerous while at the same time their reliability has been established. In our publications, texts, meetings and discussions we have urged the employment of these so-called laboratory tests and examinations. We have urged the making of positive diagnoses. We have sought to encourage all doctors to become better and abler diagnosticians. In doing so we knew that we would produce greater and more efficient therapists and physicians. That movement cannot be criticised. It cannot be abandoned. It cannot be abruptly terminated.

The institution of these Diagnostic Clinics will stultify incentives to become skilled diagnosticians. Why and how? First, the assumption is implied that correct diagnoses can only be made in the institutions or hospitals that have complete laboratory equipment and a staff of special workers. That the final summing up of all the examinations by the individual cannot result in as accurate a conclusion as the summing up of the evidence by these grouped specialists. Second, That the individual physician cannot hope to give his patient the benefit of laboratory facilities, nor does he possess the ability to know when and how to employ these tests, not to say anything about their interpretation. Third, that the individual cannot employ the services of laboratories because the fees demanded exceed the average patient's ability to pay them. That only endowed institutions can afford to make reduced rates. Fourth, that the atmosphere surrounding these clinics will establish a certain prestige and atmosphere that will appeal to the public and its peculiar characteristic that causes people to seek such surroundings because of their apparent progressive and modern novelty, or, rather newness.

For these reasons and because of their inherent possibilities they create what we may term a competitor that is impressive to the public and will meet with public response that will be beyond possible attainment by the vast number of men who are in general, and even special, practice. The tendency will be and will grow for group or clinic diagnoses, thereby relieving the practitioner of the need of making a diagnosis except in the commoner and acute ailments, for in the other cases the diagnosis will have been made for him and his connection with the case will be more in the nature of therapist or supervisor of forms of treatment recommended by the clinic. There will be no incentive for the individual man to remain abreast with diagnostic measures for his position is to be one of supervision largely.

The foregoing are only condensed and superficial objections that suggest themselves. They may readily be developed and enlarged upon, but to do so is not our intention at this time. We are not endeavoring to enter into the details of the argument—we leave that for the reader's further thought and study. We proceed to cite other objections.

For several years past we have been greatly concerning ourselves regarding

state medicine and health centers, etc. We have gone on record as being bitterly opposed to such movements or attempts to thus force upon us positions as state or public employees. That we have done as a whole, but now from among our very midst we are establishing and creating that very type of practice under another form. We may call them diagnostic clinics but in reality they are health centers or community clinics because they will exist, develop and progress by reason of public and institutional paternalism and endowment. The principle that we have in the past objected to is the same, though christened with another name and sponsored by doctors and conducted by a comparative minority of the profession. In addition, once established they will not remain limited in their scope. Rivalry will naturally follow and it will not be long before the requirement that the case must be referred by a doctor, will be removed and any individual may come to the clinic and obtain an examination and a diagnosis without having to present a reference card from a doctor. And as the movement develops it is but one short step from diagnosis to the inclusion of treatment in the clinic's function. We prophesy, that just as sure as fate, such will be the progressive inroad that will be made upon our present relationship of physician and patient. The man not associated with a clinic or hospital staff, especially in our centralized groups of people will indeed be a lone weary and sore-tried doctor living upon the scraps of the professional board.

Thus far we admit that we have concerned our reflections largely with the weal and woe of the individual doctor. We accept the objection that we are crying "wolf" because the reality becomes apparent that we are in danger of losing those who enable us to make a comfortable and somewhat independent livelihood. We recognize that there are other factors involved such as the demands of the public, the development of knowledge, the movements toward health conservation and the enhancement of physical well being of all people. We are not prepared to state that these latter reasons are not paramount or of greater importance than our individual welfare. We concede that possibly we shall fail to meet up to our responsibilities unless we do comply with these present-day theories and progressive requirements. These are problems that demand our most intense consideration and are to be seriously weighed against those of our own individual

inclinations and desires. We do not purpose to enlarge upon them. We are commenting only to draw attention to the subject and to indicate how it is pressing closely at our very doors for solution.

For that purpose and that alone have we raised and presented the question. It is for you, Doctor, to determine what our attitude shall be when you demand to be heard. There is much over which to ponder. There is indeed great need for judicious opinion and advice.

GASTRIC AND DUODENAL ULCERS

Though there are some that claim that they do cure all cases of gastric and duodenal ulcers by medical measures alone such claims cannot be substantiated. They may secure temporary relief and discharge a symptom free patient, still a cure has not been accomplished. There are those also who, with emphatic assertion declare that it is only by surgery that a cure can be accomplished in gastric and duodenal ulcers. This latter class also are in error. Medical measures do not accomplish results that are 100 per cent permanent, neither do surgical measures. Furthermore combined medical and surgical treatment does not encounter 100 per cent cures even though the patient survives the combined treatment.

There are types of cases that will respond and will be cured without operation. There are also types of cases that will not be cured unless surgery is resorted to. There is this middle attitude that is being manifested by larger numbers of internist, or rather gastro-enterologists and by surgeons.

It is not our purpose in this editorial to enter upon the discussion of the claims and assertions of the extremists of both of the afore-mentioned classes. We seek only to point out a few of the incidents and observations as well as measures that are the factors that are mobilizing in larger numbers those who now announce that they believe that there are types of cases that require and will respond only to medical treatment as well as those that cannot be cured without resorting to surgical measures. This opinion is resultant because of the following progress that has been accomplished within recent years.

Greater attention has been given to food, their values and their ingestion. What, and how to eat, as well as what not to eat, has done much to remove certain etiological factors that caused these ulcers. The next

five years will witness still greater progress along the line of dietetics.

Progress along the line of bacteriological investigations has revealed much that has a direct influence upon the formation of these types of ulcers. The selective action of certain types of bacteria has demonstrated new truths and facts. The result of foci of infection upon the gastro-intestinal tract is now recognized.

Roentgenograms now enable us to definitely establish the correct diagnosis, and the refinements of radiographic examinations are deserving of no little credit for the clearer insight that is now obtainable of this form of gastro-intestinal disturbance. Within the past few weeks Carman points how it is now possible in a large number of cases to diagnose the existence of cancer in these types of ulcers by means of certain types of deformity that may be seen during the X-ray examination.

The Rehfuess tube provides us with important diagnostic evidence and is a most valuable means in accomplishing a cure or rather a healing of the ulcer.

Indigestion, dyspepsia, catarrh of the stomach and similar masking terminology are now recognized as not being tenable diagnoses or entities. Their passing has brought about the abandoning of a waiting and expectant plan of treatment and a cessation of doping with so-called stomachics and digestants. Our therapy is becoming more and more intelligent.

It is recognized that certain types of ulcers in certain locations are definite surgical cases that will be improved or cured only by surgery. The alert do not waste time in treating them by other measures.

A review of our surgical results has demonstrated wherein and how surgery has failed. A gastro-enterostomy is not an infallible curative measure. It has its limitations as well as a fairly definite percent of jejunal ulcers that occur at the sight of the enterostomy. The excision of the ulcer and a pyloroplasty or a gastro-enterostomy does not insure in every instance a cured or even symptom free patient. We now see in the review of these surgical cases certain types that had better have been left un-operated and referred for medical treatment because of the end results obtainable by that form of treatment.

A number of other factors enter into and form the basis for this changed and temperate viewpoint that is now being held in regard to these gastric and duodenal ulcers. It is impossible to enlarge upon them or advance them at this time. They es-

tablish the opinion expressed that there is no one form or type of treatment for every case. It then becomes essential that we pursue our studies and secure individual enlightenment as to the indications that determine the proper mode of treatment in order that each case may be subjected to the method that is clearly indicated. This calls for a diligent study of the literature. It is this study that we wish to inspire and urge by the suggestions and comments that are advanced in this editorial.

APPENDICITIS

While it is true that for the past ten years or more the literature upon this subject has become voluminous and that practically every medical journal publishes and publishes reiterated theories, opinions and conclusions, the end results that are being obtained do not justify stating that the problem of treatment is solved. Dr. Randall, in a very interesting paper published in this issue, presents anew the problem that still confronts us—the mortality of the disease. Until our compiled records reveal that the average mortality is reduced by at least 5 per cent we cannot announce that further discussion of this subject is superfluous.

Certainly the diagnosis of the disease requires but little further emphasis. Except in very exceptional cases, we believe that the average, and also the mediocre man, should be able to make a correct diagnosis. To fail to do so is due to either superficial and careless examination with failure to secure a detailed history or, a total ignorance of the nature of the characteristics of this disease. Delayed diagnosis is possibly excusable at times because of the demands made upon doctors in sparsely settled regions and their inability to see the case again within 24 hours. Even then we do not believe that a delay of 24 or even 72 hours need inspire the conclusion that proper surgical interference will invariably be followed by death of the patient. Our present day mortality is not solely dependent and based upon the above mentioned factors. We are more inclined to the opinion that a mortality of 8, 10 or 12 per cent is not due so much to delayed diagnosis as it is to the technic and judgment, and also the skill of the operating surgeon. The death of a patient suffering with acute appendicitis is attributable in the vast majority of instances to two causes—refusal of the patient to submit to proper surgical intervention and second, to operations per-

formed by incompetent surgeons. The skilled surgeon will lose a case now and then in spite of every precaution, the exercising of the best judgment and the execution of the most perfected technic. His mortality will range between 1 and 3 per cent. The mortality of the occasional surgeon will run as high as 20 per cent. That is the personal factor that is responsible for the higher and increasing mortality of the disease. It is not pleasant to record that conclusion. It is the conclusion that cannot help but be drawn by one who closely observes and studies the causes of death in definite instances.

We know of men who have not met with a higher mortality than $\frac{1}{2}$ of 1 percent for a period of 15 years. They have had their share of perforated, gangrenous, retrocecal, abscess, and complicated cases and still maintain that low mortality, by reason of the skill they exhibit in the surgical technic that they execute. On the other hand, another man with a similar type of cases operated upon almost exactly similar conditions will, by reason of faulty judgment and technic obtain a mortality, shall we say, that is unjustifiable.

Dr. Randall is to be commended for drawing our attention to the present average mortality of appendicitis. We appreciate the end that he seeks by raising this question and we are sure that he desires to stimulate serious reflection on the hope that we may see the light. Naturally he refrains from pronouncing condemnation upon incompetent operators. Had he done so he would have been criticised and accused of egotism. We too, have been somewhat hesitant in frankly setting forth the real reason for the high average mortality. Nevertheless, we have felt that the burden of doing so was clear and that we could not shirk that responsibility. In order that we may not be misunderstood permit us to recapitulate: A greater than 4 per cent mortality in appendicitis is due to: First, refusal of the patient to submit to proper surgical interference; second, failure to make a diagnosis and this is due to the ignorance or carelessness of the medical man or surgeon called to attend the case. In doubtful cases complete examinations have been neglected or proper counsel has not been called, and watchful waiting was continued too long; third, inferior surgical judgment, technic and skill on the part of the man who operated. And of these three we feel that the most frequent cause is that of deaths resulting from inferior surgery.

The man who had no deaths is not being

called upon to operate for the removal of diseased appendices. The best man must and will have some mortality following his surgery. However, his average the year through will be within an acceptable percentage. The man whose mortality is far greater than that acceptable percentage needs well to revamp his policies in the handling of this class of his cases.

In the end then, it is incumbent upon every surgeon who attempts to or does operate upon cases of appendicitis to seriously reflect upon the mortality he is encountering and to realize that an excessive average is directly attributable to himself and cease salving his conscience by concluding that it is due to other factors and "bad luck." In proper hands the average will be lower than that imparted by Dr. Randall. It will not become so until we all recognize the factors that make for the high average and then govern ourselves accordingly. We do not purpose stating who is or is not fit to operate; that question must be answered by each operating individual. You must pronounce and execute your own sentence and you will if you are a man.

"BRITISH HEALTH TALK"

In the New York Times of Sunday, September 18, appears an article entitled "British Health Talk"—a lecture by Sir James Cantile, one of England's foremost medical authorities. This lecture has attracted widespread interest and has appeared in many of the leading English newspapers. He calls his lecture one on health-helig-holiness. He asks the question—"What Is Health?" but states he cannot answer the question.

Contrary to the accepted idea that we received as a result of the war—i. e. that the English race was below par physically—he states that British children, (be they of country or town, poor or rich parents, were almost as a rule excellent specimens.

The staying power of a horse is the matter of inheritance, and so it is with the child. Food is the essential thing. He is not much in favor of artificial feeding; next to mother's milk, he seems to favor the foster-mother or wet nurse. He relates the case of a large family where part of the children were raised on the bottle and the others by a foster-mother. The results were all in favor of the foster-mother. He shows distinctly the disadvantages of bottle feeding; especially does he mention the fact that when the child is born it has all its fifty-two teeth in the gums. The surfaces

of the gums are scalded and kept in a state of irritation by the use of the bottle and rubber nipple. This results in depriving the gums of their proper nourishment, causing them to decay early. Even the permanent teeth are affected.

We cannot rear a healthy nation on rotten teeth, and he makes a strong plea for a national inquiry along this line. The idea that brushing the teeth and eating hard biscuits in order to save them is "tommyrot" to him.

He says: "Really healthy persons should never have to brush their teeth." This, of course, is contrary to the everyday practice, such as tooth brush drill in public schools and advice given by our dentists.

Then he discusses the question of clothing, and states that the clothing for children especially should be one pound weight of clothing for every stone weight of body as a standard.

His remarks relative to corsets are interesting. He states, "during my practice in the tropics I found that women had fewer liver inflammations and that I operated on many men for liver abscesses, but never once on a woman, and I attribute the fewer abdominal troubles in women to the even temperature maintained by the corset." Another example, the kilt of the Highlander as a cause of fewer abdominal troubles than in other regiments.

He calls attention to over-indulgence in so-called sports. Especially does he condemn the long distance swim. He warns young men between the ages of 18 and 25 years not to over-do in any sports, such as rowing, bicycling and running. During the war he was surprised at the number of men between 40 and 50 years who were rejected because of heart conditions, varicose veins, etc., who confessed to over-indulgence in the above mentioned sports when younger.

Summary: He calls attention to three things as being necessary:

1. A greater care of teeth, especially as regards the use of the nursing bottle.
2. That the corset is an advantage to women, at least in tropical countries.
3. The bad results of over-indulgence by young men in so-called sports.

—W. J. STAPETON.

SURGICAL JAZZ

(Submitted with some hesitation. Time, the present. Location, in one or more offices or practices in numerous localities).

Prologue

Centuries have passed since the Hippo-

cratic Oath was first formulated. Down through the march of time it has been the sacred guide of all followers of Aesculapius. Then came the world's upheaval, and war, shall we say, warped the integrity of many men in all avenues of life. Commercialism imbued the many. It wrapped its tentacles about and ensnared the men of medicine. Lest we forget, once again do we repeat the "Oath" that should motivate you men whom we acknowledge are the descendants of that first physician of Man; and call upon you to note well the course that you pursue.

The Oath

I SWEAR by Apollo the physician, and Aesculapius, and Health, and All-heal, and all the gods and goddesses that, according to my ability and judgment,

I WILL KEEP THIS OATH and this stipulation—to reckon him who taught me this Art equally dear to me as my parents, to share my substance with him, and relieve his necessities if required, to look upon his offspring in the same footing as my own brothers, and to teach them this Art, if they shall wish to learn it,

WITHOUT FEE OR STIPULATION and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the Art to my own sons, and those of my teachers, and to disciples bound by a stipulation and oath

ACCORDING TO THE LAW OF MEDICINE but to none others, I will follow the system of regimen which, according to my ability and judgment, I consider

FOR THE BENEFIT OF MY PATIENTS and abstain from whatever is detestable and mischievous, I will give no deadly medicine to any one if asked, nor suggest any such counsel, and in like manner I will not give to a woman a pessary to produce abortion.

WITH PURITY AND WITH HOLINESS I WILL PASS MY LIFE AND PRACTICE MY ART.

I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; AND FURTHER from the seduction of females or males, of free-men and slaves. Whatever in connection with my professional practice or not in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I WILL NOT DIVULGE as reckoning that all such should be kept secret. While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the Art respected by all men in all times!

But should I trespass and violate this Oath, may the reverse be my lot!

Scene 1

Good afternoon, Mrs. Jones, I am glad you telephoned you were coming for I was just about to go out on a call to Mr. Drof's home to see his son who they think has an acute appendicitis. O, no, I am only too

glad to spare the time right now, I would not think of cancelling your appointment. Yes, very busy, in fact I am almost completely fagged out. I am compelled to turn down numerous calls. Why, this morning they wanted me to come to Tnulf to operate upon Brewster's son, who they report has a fractured skull. I did feel that I should not be out of call of several very sick cases in the hospital. Then, too, if I had gone I would have had to disappoint four patients, who I scheduled for operation this morning. Humph, pain in your right side and you say you never had it so severe as to cause you to go to bed, you have never vomited during an attack, nor been nauseated, the pain comes on most usually at night time and never bothers you in the morning, and is never sharp nor has it been general throughout the abdomen? Humph! Just lie down on the couch a moment, no you need not loosen the clothes. It's right here that you feel the pain, but don't feel it now and haven't had it for three months except last night, after that long walk you took? Humph. Why, Mrs. Jones, you are one woman in a hundred and you sure may count yourself lucky that more serious complications have not developed. I can't see what Dr. Son was thinking of when he failed to give your condition more serious attention. He certainly failed to recognize that your appendix was involved. I often wonder how some doctors can continue to repeatedly fail to recognize diseased appendices. I have seen over six hundred cases and confirmed my diagnosis each time at operation, but it is experience with large numbers of cases that enable one to make accurate diagnosis. No, my no, there is no question but what that is your trouble. You have a concealed bomb in your side that may explode at any moment and set up a fatal peritonitis. Mercy, Mrs. Jones, do not think of trifling any longer, you must be operated upon just as soon as we can make arrangements. Oh, yes, I do the operating, you know that my practice is all surgical. I am operating every morning and really, Mrs. Jones, I am surprised at my results, I am not ashamed to put my cases alongside with any great surgeon. Why, two months when I visited Oyam at their invitation and told them at dinner one night my results, they admitted my record equalled theirs. Now listen, I'll take you home in my sedan, (Dodge) and then you can lie down until Mr. Jones comes and you can tell him what I have told you, then when I return from my calls I will drop in about 9 o'clock and take you

in my sedan to the hospital and we will operate the first thing in the morning and have it over with. I wouldn't think of letting you wait one day longer. Oh, no, don't worry about your heart, it certainly is in good condition, because you have had no pain referred to it and as far as your lungs are concerned, why, Mrs. Jones, you are foolish to worry, leave all that to me. Now not another word, come, we will start now. Exit. (Note: The doctor has his way, the operation is done, no further examinations are made, a perfectly normal appendix is removed, recovery ensues and Dr. Jazz has another successful appendectomy chalked up. Dr. Jazz, by the way, collects \$150, he is no fool and has some ability).

Scene 2.

Wont you have this chair? Yes, I am Doctor Murphy. Oh, yes, Mrs. Ames, I remember her well, her's was a most difficult case in which our operation was very successful, after the several failures she encountered from other hands. So she recommended you to come to me? Is that so? And this is your little girl Marion? My, what a sweet, dear child. How happy you must be to be the mother of such a bright child. Only seven years old, gracious what a lovely daughter, and so refined in her looks. Worried, are you about her, now tell me and be sure I will be very frank and truthful with you. Never missed a day at school, taking music lessons, umph, and dancing lessons also, and studying her part in the amateur rehearsal at the Parish house and to the movie only two nights a week and lately she seems to be tired all the time, and complains that she has a funny noise in her ear? Well, well, we will have to look into that. Now, Marion, just sit up in this chair and turn your head this way. That is a sweet girl. Goodness what beautiful curls. Umph, a white glistening ear drum, no bulging. Nurse, have Dr. Lab step in to make a white count. Now mother, don't worry, we simply must be thorough in our examination in order to tell what the real condition is. When did you notice this swelling in front of her ear? Yesterday, and you say she complained of this pain while eating and screamed when she ate an orange, well, that complicates matters. Excuse me a moment. Nurse, please take Marion's temperature while I see the Senator in the next room. (Interval) Now mother, Dr. Lab reports an increased white count, Marion's temperature is 100.6, the symptoms are all clearly indicative of mastoid involvement. She must go to the

hospital at once and have a mastoid operation. Yes, it is a serious operation, but it must be performed without delay, because you know there is but a thin plate of bone, not more than a sixteenth of an inch thick between this diseased area and the brain, and if this pus burrows into the brain, a fatal meningitis will ensue. Of course it is a very delicate operation, because I will be working so close to the brain, but you know I will be very skillful and careful and we will hope for the best. Nurse, call up the hospital and tell them that I am sending in an acute mastoid and will operate at 5 o'clock and also phone my wife that I will be delayed for Banker Perkins' dinner on account of an emergency operation. Exit. (The operation is done, a normal mastoid is drained. Marion convalesces with a complication of parotiditis which the doctor records as an unusual complication in his next paper on 500 Mastoids. This Dr. Jazz also collects a bill, but it is one for \$550 and so he rides in a Baker Sedan to Perkins' dinner party).

Scene 3 and 4

(These are omitted in this Surgical Jazz play because they depict the preliminary Jazz strains of a thyroidectomy in a girl of 17 and of a gastro-enterostomy for alleged gastric ulcer so diagnosed upon the symptoms that are typical of a gastric crisis. The Jazz theme prevails with varied expressions, crescendos and profundos).

Epilogue

Thus midst rapidly changing scenes that mark the progress of the play the Jazz spirit stands forth trespassing in upon the sacred precincts of the disciples of medicine. It is revealed in the travesty that is enacted by men whose integrity and honesty have become warped by their quest for wealth and whose ego is well nigh super-exaggerated. As their wealth increases their respect becomes doubly calloused. At the roadside the honest doctor pauses as they pass, and ponders in sadness upon the baseness of human deceit and marvels at the stultifying influence of the Jazz spirit. The relentless critic travelling along the by-paths and deserted lanes, notes here and there the wrecks and Jazz-operated individuals who continue to exist midst physiologically altered bodies that are now life's burden and trial to the Mrs. Jones and Murphys who were hypnotized and fell under the opening strain of our present-day surgical Jazz. And you wonder why the Pathists and Practics multiply before us! The vision is not granted us to depict the

end of the present day surgical drama. Ere the curtain falls the opportunity still presents for these sinners to repent. The faithful still hold high the torch and as they fall they fling the torch of Truth. May the out-stretched hands increase in number to seize it and wipe out these syncopated-surgical-Jazzites!

Curtain.

(Editor's Note: The above was submitted by a layman whose business and civic relationship bring him in frequent contact with the profession and its activities. Space is given to this observation because we realize that there is a reason for what he has written. It also is a thought that merits our serious consideration.)

"ADVICE FROM THE JACK PINES"

More than forty years a physician.

Part of this in the big city; balance in the country.

Some of it in the east, some of it in the west.

Buy books, read and take journals.

Not tied to the business, can make my simple living otherwise.

Not any man's competitor. Take pleasure in seeing some other M. D. get the mean ones.

Don't care for much business, rather stay at home and read what other doctors are doing.

Have no one out plugging for me, rather tell them I don't wish to go.

Know plenty about modern equipment, but mine is very crude.

Can't afford better, my patients are not rich.

But they come a long ways to see me, always pay and say "thank you."

I like to take care of such. They know me, I know them, and they think they need me.

But, Say, Doctor, there is another class, and many physicians are running after them, catering to their crookedness and making them worse.

And one fool doctor can make the rest of the profession lots of trouble.

Two doctors down on the corner glowering at each other over a case of midwifery. Both have their little black undertakers' outfits with them, already for the flag. One of them sent word to them yesterday that he would take the case for fifteen dollars. Gee, that man engaged me over a week ago. I told him I did not want more obstetrical cases. That my price was twenty-five and extras and spot cash. He said "O. K. Doctor, here is fifteen dollars on it and we shall expect you." When I go to that case they will use me right, the case will be in my hands, and I will come home with my money and no bad taste in my mouth.

"A little with content is much

To those who'll rightly use it

Who'll take it as the Lord has sent

And then does rightly use it."

Say, Again, what do you think of those summer resort doctors, who come up into the woods every summer and queer the local doctors' business. Some of them act as though they were shy of business at home. After the long hard rides over almost impassable roads, maybe miles between houses to take care of the needy, to bring them through the winter and get them on a paying basis it don't look right for some old dope-fiend specialist to come up and board around and go back with what little money the doctor has helped them accumulate,

leaving a community full of instructions about the use of strychnine, nitro glycerine, pituitrine and a few other simplas.

On my shanty door is the notice: "If the patient has the right to choose his physician in the summer then the doctor has the right to choose his patients in the winter." That settles it.

Yes, I am a poor man. Have to be or I could not know these things.

And now comes the Rev. John Doe, M. D., who tells the laity that doctors are charging too much. He also tells them that the society has appointed a committee to make a new fee bill. And possibly so. Can't tell what these way up fellows will do next. Get a lot of city pracs, who get from five thousand to ten thousand for an operation that many a country prac could do better, get them to say that a dollar is enough for a house visit, fifty cents for a surgical dressing, seventy-five cents for office consultation, examination, blood pressure, urinalysis and medicine. I get three dollars for a house call, one dollar a mile, no out trip less than five dollars. Twenty dollars for twenty miles, and they pay it without whining. If they whine or put up that little sad cough, I never go again, and by the way lots of them are getting over that cough. But when I go I try to earn my money. I hardly ever have to make the second trip. Yes, sir, and most of them get well.

Low mortality rate is what we should aim at. If we have a remedy that worked promptly forty years ago and will do so yet, we use it. If a man has a fish bone in the throat, I try to get it and read about the blood count after I get home.

And I don't talk so much about medicines as I used to. I never leave a lot of medical advertising stuff around the floor or desk at the post-office. Nor do I leave it upon the office table for public reading. I try to do what is necessary and my own way.

Forty-three years, Doctor, and a failure in many ways. But my patients get well and they make long drives through the woods to see me.

Confinement cases, how I dread them, but in the houses of my friends it is so much easier; I go for such people. But I have never lost a mother yet, nor a child that was alive when I got there. Bull head luck. Must my turn come? Not if I quit. What you going to do? And some doctors are writing that the doctor is making too much money. Not one of those fellows would do my work one week. And there are thousands of other doctors who can relate the same kind of stuff. Thank You, Doctor. I say that to you as others sometimes say to me. But you are only part right on that therapeutics matter. It's a matter of judgment, knowledge, experience and study of each case by itself. For seventy-five cents???

A few months ago serum and vaccines were more popular with our patients than at present. Are we sure that we are getting the results we expected from them? Our patients do not think so. When we lance a boil and give immediate relief, we make friends for our profession, but some people do not take kindly to experimental work. What is "Empiricism" anyway. I guess it's what the other fellow does. Results count more in medicine than in any other line. Again, I learned a great deal about modern medicine from Vaughn's excellent article upon "Sensitization." There is a warning in that we may do well to heed. Many of these things have been proven safe and useful, but what's the laboratory for? Surely some great discoveries have been "untimely ripped." And some are doing things without due knowledge.

Now here is one—A little boy was ill. His father took him to the office of two good physicians. They

correctly diagnosed the case Diphtheria, and administered a full dose of antitoxin. Then the little fellow walked home, a distance of five blocks. In half an hour he was dead. Do we get enough of the practical in the class room?

No one has better knowledge of human nature than the observing physician. He knows there are many good people in this world and about as many perverse ones.

Many of those who are talking about doing so much for the public are planning to do them.

The best place to do good is right in the sick room. That's the place to think, but not to tell them all we think.

For six months in the year up here there is not business enough to keep the doctor from thinking. The balance of the time the roads are so bad he has lots of time to think, going and coming. I think we have a lot of good physicians in Michigan and if the public will do as well by the medical fraternity, as it is doing by them, we shall not need any more bureaus or commissions.

You are putting up a good journal. I like it best of all, and I am called a crank upon medical literature.

No, Doctor, I don't talk this way to other folks, not even to physicians. But no one else will say these things to you, and you know enough of the medical situation to read and not be impressed detrimentally by it.

Now, here is another one. How shall we stand in the eyes of the people? It costs a doctor money to keep up with the advance in medicine. The impression we make may count more than some imagine.

I gave him a pretty thorough exam. Way better than he had ever received before. I gave him seven tablets, one every day after dinner. I had every confidence that they would help him. They did. I charged him \$3.00 first time, worth the money. He was pleased with results. But this time I gave him a good look over and gave him seven more tablets. As he prepared to leave, he asked: Oh, Doctor, how much for these little tablets, and as he spoke he held out his hand, and in it I saw about thirty cents in pennies and small change. How. Why, the first time I also gave him a four-ounce bottle of gentian solution. I should have done so the second time, for he was not one of my regular patrons, but a sort of transient.

In time our regular patients will learn the real value of real treatment.

Any way Doctor you are not likely to get much of this stuff from me for do you know, I am getting old, one of my outside patients said so the other day, and I very promptly told him not to fool himself with the notion that I was too old to charge.

JACKSON COUNTY SOCIETY CLINIC

The Jackson County Medical Society held a clinic at the W. A. Foote Memorial Hospital on Oct. 17, 18, 19, 20, 21. Unusual public interest was aroused and co-operation of the press secured by the novel plan of giving an open forum meeting for the general public on public health problems and furnishing medical men as speakers for the various noon luncheon clubs of the

city continuing through the week. The program was as follows:

MONDAY, OCTOBER 17

9:00-12:00 and 2:15-5:00—Internal Medicine—Dr. C. G. Jennings, Dr. P. F. Morse, Detroit.

7:00-9:00—Dr. Theodore McGraw, Jr., Detroit. Subject: The Relation of the Endocrine Glands to Body Growth.

Lantern slide demonstration.

TUESDAY, OCTOBER 18

9:00-12:00 and 2:15-5:00—General Operative Surgery—Dr. M. M. Percy, Chicago, Ill.

WEDNESDAY, OCTOBER 19

9:00-12:00 and 2:15-5:00—General Medicine—Dr. Mark Marshall, Ann Arbor, Mich.

THURSDAY, OCTOBER 20

9:00-12:00—X-Ray demonstration, lantern slide—C. W. Crane, Kalamazoo.

2:15-5:00—Eye, Ear, Nose and Throat Diseases from the Standpoint of the General Practitioner—Dr. Royal S. Copeland, Commissioner of Health of the City of New York.

5:30-7:30—Dinner, Physicians and Ladies at "Meadow Lark."

8:00-9:30—Open Forum at West Intermediate School—Dr. Royal S. Copeland, Commissioner of Health of the City of New York. Subject: Modern Public Health Problems.

FRIDAY, OCTOBER 21

9:00-12:00—Orthopaedic Surgery, Clinical—Dr. W. E. Blodgett, Detroit.

2:15-5:00—Gynecological Surgery, Operative—Dr. C. Barrett, Chicago, Ill.

As far as known this plan has not been tried out before and it was a complete success, all specialists attending expressing themselves as delighted with the scheme. The management of the hospital gave wonderful support in every department and donated beds free for 24 hours which gave the visiting physicians an opportunity to classify and arrange the work the day before the cases were to be presented, making the handling of large number of cases a much easier task and admitting of closer study of the ones presented. Full and complete case histories were prepared by the attending physicians in advance which also proved a time saving element.

Physicians' office hours universally adopted by the Jackson physicians were 1-2 p. m. and 7-9 p. m. such evenings as were not taken up with the evening sessions. Considerable interest was shown by medical men outside of Jackson County, and such as were fortunate enough to come the first part of the week, returned for the balance of the session.

One gratifying feature of the plan was the attendance of men not members of the society. These men made application to join after they observed the class of work turned out and the fine instruction the attending medical men gave.

Leading up to the week's clinic, the so-

ciety gave a series of monthly one man evening clinics the first months of the year. These were very satisfactory and instructive and assured a large attendance of members.

The summer months, during which no clinics were held, were livened by a field day and picnic at Mack Island which helped to keep up interest in the society and assisted materially in starting the fall meetings off with plenty of pep and a fine spirit of co-operation between the members of the society and their officers who are as follows: E. S. Peterson, president; H. A. Brown, vice president; L. J. Harris, treasurer; T. J. Hackett, secretary.

Rhoda Grace Hendrick, special reporter.

Editorial Comments

The old saying about never prizing the music until the fair sweet bird has flown is apropos about more things than song birds. We have all fallen into a more or less vicious habit of looking off into the distance for things that are new or exemplary of modern progress and the application of modern methods. We fail to see that which is equal and in some respects superior than that found at the distant place, at our very feet and door steps. We spend time and money travelling to distant places and clinics when those that are within the boundary of our own state and which can be reached within a few hours' travel by train or automobile are passed by. Visiting foreign or distant clinics is commendable providing we also profit by what can be obtained at our home or rather state clinics and institutions. Recently we have gained more information, secured more practical points and derived greater benefit at an expenditure of less time and money than was obtained at some of the larger centers in this country, during a series of visits to several clinics and hospitals in Michigan. We recommend that our members look about them and try the same experiment that we made. You will be most agreeably surprised. We also suggest that some of our institutions, hospitals and clinics in Michigan make a dignified effort to acquaint the profession with the work that they are doing. Such a program will be conducive to increasing the solidarity of the medical fraternity in this state.

The old word "duty" is not heard a great deal of late. It is looked upon largely as a relic of stuffy times, now quite out of date. It smacks of preaching and many there are who detest that method of exhortation. It is much more exciting to forget all about duty and go sailing up in the air in pursuit of all sorts of iridescent altruistic rainbows than it is to stand right on the ground and "Do the first thing next." Many are like the man writing a treatise on social economy who died of typhoid fever as a result of filthy drains under his own house which he neglected to have cleaned. When you go out of your way and beyond your duty, having first performed it, in the service of your own people and your Government, and when it costs time, money, labor and perhaps physical suffering to do so, you may aspire to the noble name of patriot. There are not so many. After all the advice that Sherman gave to the young man

who came up to him and stated that he wanted to know where he could join and fight and was told "Step right into line anywhere. There are a lot of places to fight in almost any place along the line"—is applicable to many conditions that confront us today. The vital point is, are you willing to assume the performance of your duty. You can start in at almost any place and find plenty of opportunity to acquit yourself. Think it over.

Our Journal is made possible only because of the patronage we receive from our advertisers. If it were not for these advertisers it would be necessary to increase our dues \$5.00 per member to cover the cost of publication. It therefore devolves upon each member to do his part in maintaining these advertisers by giving them their patronage. How many of you answered the ads in our last issue and how many of you are going to answer the ads in this issue? Many of them offer to send you useful and valuable literature and samples. Write to them.

A conference of State Secretaries, Public Health Officials, Welfare Organizations, Social Workers and the several standing committees of the American Medical Association will be held in Chicago during November. The end sought is a program of concerted organized effort to advance the profession's welfare and to accomplish the education of the public in regard to the problem of public health. We hope to be able to impart in our next issue the plans that are to be developed during this coming year.

Don't hate your competitor, hate is expensive. Get acquainted with him. You may learn something. Don't knock your competitor. It sounds bad and is bad. Be a good sport. Play the game. If your competitor lies about you, or uses underhand methods to harm you, don't worry. He is cutting off his nose to spite his own face. He cannot fool all the people all the time. Straight business and good nature win out always in the long run. Your competitor will do you a great deal of good if you keep your eyes open. He will keep you from slumping. He will make you energetic, careful, more attentive to business and altogether will be a good tonic for you, if you know how to use him.—Dr. Frank Crane.

To carry out an operation correctly, a few months' study is sufficient, while to decide on the indications for operation one should have a surgical experience of years.

The social-service department of a hospital should function as the X-ray department does—not as an independent agent, but as a part of a team under the direction of one guiding mind. The facts elicited by the social worker's studies, talks, and visits should (like X-ray data) be pooled with the data of physical examinations, laboratory findings, etc. Then they are appreciated and of value; not otherwise. So with her educational therapy. It will often go wide of the mark, unless supervised. To turn a patient over to the social-service department once for all is a common but wholly mistaken practice.

The pages devoted to the publication of the letters received from our members who thus impart their views, reflections, experiences and their position in regard to scientific matters and medical economics should be of especial interest to all our

members. Once more do we urge that you utilize this department of your Journal. Our readers, we are sure, will appreciate the viewpoint and comments of others. While your Editor attempts to record a tempered medium we are all interested in reading the conclusions of those who incline toward extremists.

We realize the values of autopsies. We know that properly conducted they will convey much that is of value to the men who study their cases. They will supply much that is of important value to the discussion of medical subjects. Recognizing then the value of autopsies the problem confronts as to how more of them can be secured in the practice of men who are not connected with teaching hospitals and those who are away from the larger medical centers. We would like to publish the views of our members and have them enlighten us all as to how we may secure more autopsies. May we not receive your constructive suggestions?

Numerous and complex relationships have been noted between the functions and structures of the various endocrine glands. The normal sexual functions are largely dependent upon a normal condition of the other internal secretions. Lack of sexual development and absence of secondary sexual characteristics occur in cretinism and in certain pituitary diseases such as Frohlich's syndrome. Menstrual disturbances may accompany thyroid disease in women. Sexual precocity has been noted with pituitary disease, pineal tumors, and adrenal tumors. The pituitary gland enlarges after thyroidectomy and during pregnancy. The adrenals enlarge during experimental hyperthyroidism, and many symptoms of exophthalmic goitre indicate a stimulation of the sympathetic nervous system, such as might result from the excessive liberation of epinephrin from the adrenal glands.

Such complex inter-relationships, of which we have named only the best established, often make difficult to determine which gland is responsible for certain symptoms in diseases of the endocrine glands. Consequently in this day when glandular therapy is receiving so much consideration it becomes very important that before a given glandular product is prescribed that a careful effort shall be made to definitely, as far as possible, determine just which internal secretory gland is involved. Such determination is essential for intelligent therapy.

Crile, in a recent article, states that in some 6,100 operations his mortality was 1.6 per cent. That is a splendid example of surgical skill and judgment. It demonstrates surgical ideals and possibilities. It represents years of hard, painstaking and studious work. It characterizes surgical mastery. It is not given to all of us to be permitted to work under conditions and with the surroundings that exist in the Lakeside Hospital at Cleveland and thus have available such ideal conditions. However, it is possible for us to strive continuously to attain as near as possible those conditions, exhibit similar studied diagnostic skill and perfected execution of surgical procedures. By so doing our mortality percentages will lessen and we will have come that much closer to the ideal. We cite the incident merely to awaken a spirit of ambition for better surgery.

Just why we should find it necessary to continuously remind our members of the need of patronizing our advertisers is difficult to explain. We have

often stated that without these advertisers it would be impossible to publish The Journal. Just as soon as we let up in making these reminders we receive cancellation orders from advertisers because they are obtaining no results from their copy. So again we repeat, patronize our advertisers. This issue contains two new firms who merit your patronage. They are placing their copy on trial. Unless they obtain results their contracts will be cancelled. It is up to you to see that they are satisfied with the returns. This is true not only of new advertisers, but also of those who have been using this space for years. Send for their samples and literature. Do it today. Help us to thus defray publishing expense and give you a better Journal.

"The pulmotor was used." Every now and then we see that statement in connection with the resuscitating measures mentioned as having been employed when a patient is in extremis. We cannot help but wonder when some will realize that the pulmotor is obsolete and even considered as taboo. In a recent questionnaire sent out and published in the West Virginia Medical Journal in answering the question as to what might be considered as obsolete, several mentioned the pulmotor. The answers came from noted internists and surgeons of this country. It is confidence and time wasted to employ a pulmotor. There are other more valuable methods.

Your stationery, letter-heads, bills and cards, may create favorable impressions or the contrary. We have realized for sometime that the prices quoted and which our members pay have been consistent with the tendency to get all that is possible. You have, no doubt, been paying your printer an overly handsome profit. To enable our members to save on this expense we have been able to secure practically cost quotations. We have arranged so that you may benefit thereby. We refer you to the announcement and order blank in our advertising section. If you want to save money, here is an opportunity.

We are pleased to see a state-wide manifestation of interest in society work. Excellent programs are being put on by the society officers. This represents much effort and labor on behalf of your county society officers. Effort that is often appreciated in a matter of fact way. Little thought is given to the work that is done in arranging these meetings. You cannot expect your officers to continue with enthusiasm unless you demonstrate that you are appreciative of the time they are contributing. The least that you can do is to make more than an ordinary effort to attend the meetings and participate in the discussions. It is to your personal interest and profit to do so. Incidentally a word of appreciation and encouragement will maintain their enthusiasm.

We congratulate the members of Jackson County on their splendid program and society activity. What they have accomplished can also be accomplished in other counties. It is such effort as this that strengthens organizational interest and tends to cement fraternal relations.

COMMUNICATION FROM THE LEGISLATIVE COMMITTEE

It might be well for us to stop a moment in our mad race for big things to ponder on the question raised by Thomas Huxley at the dedication of the

Johns Hopkins Medical School in 1876. That speech comes home to us today with peculiar meaning and it is well worth reading and re-reading. Thus spake Thomas Huxley, the gallant apostle of truth, the whole truth and nothing but the truth, forty-five years ago:

"Do not suppose that I am pandering to what is commonly understood by national pride. I cannot say that I am in the slightest degree impressed by your bigness, or your material resources as such. Size is not grandeur and territory does not make a nation. The great issue, above which hangs a true sublimity, and the terror of overhanging fate, is what are you going to do with it? As the population thickens in your great cities and the pressure of want is felt, the gaunt spectre of pauperism will stalk among you and communism and socialism will claim to be heard. I cannot understand why other nations should envy you or be blind to the fact that it is for the highest interest of mankind that you should succeed; but the one condition of success, your sole safeguard, is the moral and intellectual clearness of the individual citizen."

If we are fighting today with our backs to the wall to prevent the socialization of medicine and the degradation of the individual, it is because in our race for bigness, we have permitted our moral and intellectual clearness to be befogged. As individual practitioners of medicine, we have boasted of our great national organization and its great Journal. We took pride that the A. M. A. was worth almost a million dollars in quick assets and that the income of its Journal was reaching toward that princely sum of one million dollars for one year's income. We bragged that our association numbered its members by the thousand but we forget to ask Huxley's pertinent question, "What have we done with it?"

When we cast up accounts, our pride is due for a hard fall.

We have permitted our great national organization to become the plaything of "paper philosophers," men too rich or too tired or too lazy or too ambitious to tread the thorny path of the practice of medicine; men who prefer the job of telling us what to do, to doing it themselves; men who chafe at the long, tedious apprenticeship of the physician and surgeon, but prefer short cuts to positions under various names; men whose sole aim is to sit on a throne, directing and controlling a horde of medical slaves who are to do all the work, take all the responsibility but to pass up the rewards. And all of this has happened, because we have been too busy growing big to be sure that we were growing just. We gave these men power and like Oliver Twist, they wanted more. It is a human failing, for all men are potential despots at heart.

We have seen our good money paid out in salary to an avowed apostle of Compulsory Health Insurance by the Council on Health and Public Instruction of the A. M. A., at the bidding of a chairman who was a shining light in the councils of the American Association for Labor Legislation, sponsors for the socialization of medicine. And we were asked to accept the report of this apostle and his brother of the A. A. L. L. as being disinterested.

This year, we were treated to the spectacle of a leader of the A. M. A., a gentleman who has been a power for years in shaping the policies of the A. M. A. and its Journal, appearing before the House of Delegates to repudiate a speech, favoring Compulsory Health Insurance, which he had made some time ago and which had been printed in the Journal of the American Association for Labor

Legislation. He did not claim that he had not been fairly reported but now that he was a candidate for re-election as Trustee and the A. M. A. had gone squarely on record as opposed to Compulsory Health Insurance, he wanted to take it all back. A man has a right to change his mind but to the disinterested observer, that change would have been in the better taste, if announced at a time, when the candidate was not looking for votes.

And to add to the strangeness of the situation, we found men who were openly favoring "State Medicine" on the score that it means bread and butter to them, jumping in to back up this candidate who was recanting the very opinions his backers were favoring. These Public Health Officials waxed indignant as they denounced the men who had brought out this speech of the candidate's favoring socialization; they called on the House of Delegates to try them for treason and to boil them in oil, if necessary. And what had these men done who were being thus roundly abused? They were simply trying to find out whom this candidate would represent, if elected. He had preached Compulsory Health Insurance in the A. A. L. L. Journal and the question of moment was, will this candidate, if elected, represent an interlocking directorate of the American Association for Labor Legislation and the A. M. A., or will he represent the overwhelming majority of the medical profession who are opposed to the measures for which the socializers of medicine stand? The candidate was elected after a hard fight. Time will tell but vigilance alone will be the price of knowledge.

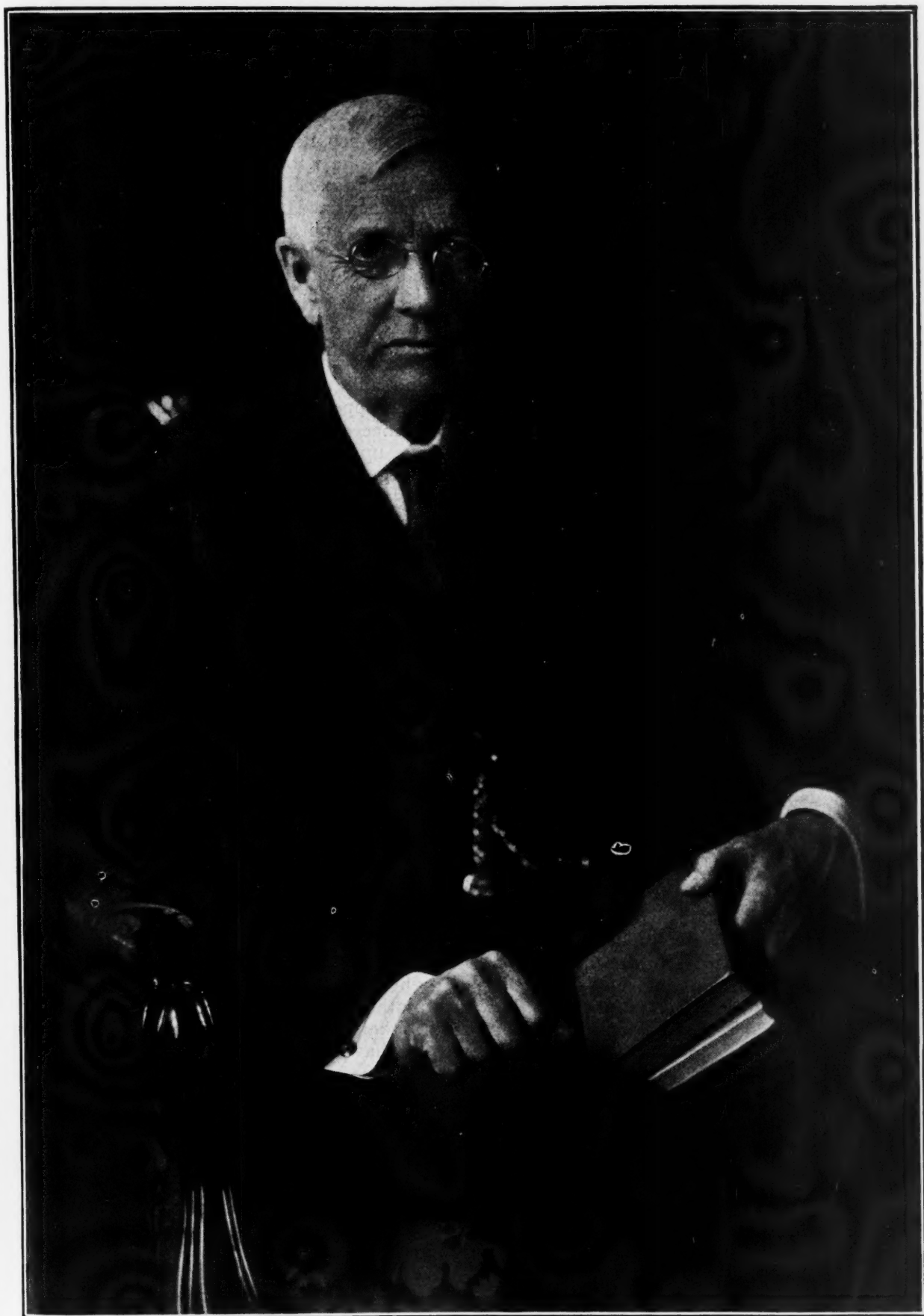
We have lived to see Johns Hopkins fix a fee for a week's care by a physician at \$35. A salary which many a taxi driver will scorn. All these things we have seen and the question is, what are we going to do with it? That no man shall be able to plead ignorance of existing conditions, is the purpose of the Bulletin. The profession must fight. If necessary, take a beating and fight again. Our socializers hope to tire us out but once we drive them into the open, take from them their brazen shields of wealth, position and reputation, behind which they are hiding, then and only then, will the overwhelming majority who pay the freight come into their own again and the A. M. A. represent the physicians of this country and not be the mouthpiece of our "Paper Philosophers."—Bulletin of Wayne County Medical Society.

Deaths

DR. THEODORE McGRAW

On Tuesday, September 6, 1921, death claimed the most beloved and esteemed of our professional brethren. At 2:30 p. m., Dr. McGraw closed the book of a long life of service and achievement in the medical profession. Failing in health for some time, he succumbed to his malady at his residence, 8162 Jefferson, in the presence of his family.

Dr. McGraw was born in Detroit on the 11th day of November, 1839. He was the second son of the boot and shoe merchant, Alexander C. McGraw, and Susanna Walker-McGraw, who, at the time of his birth, resided in the residential district of



DR. THEODORE A. McGRAW
Born November 11, 1839; Died September 6, 1921

Detroit, corner of First and Congress streets, west. When young Theodore reached the age of six years, his father entrusted his early education to the private school conducted by Mr. Bacon. He attended this institution with his school chum and life-long friend, the late Henry C. Ledyard, who died in July, 1921. There were three brothers, Edward, died in San Francisco in August, 1921, at the age of 84; William A., died in Detroit in 1898; Augustus C., died in 1907, also in Detroit.

After attending the University of Michigan he graduated from the literary department with the degree of Bachelor of Arts. He was a member of the Alpha Delta Phi fraternity. It was his intention to devote his life to the practice of law and he decided to study the fundamentals of jurisprudence in Germany. In 1859 he went to Bonn with this object in view. Here he became acquainted with the professor of anatomy of the university, who took a keen interest in the young American. Dr. McGraw was very anxious to master the German language and found a great pleasure and advantage in conversing with his new acquaintance. In order to keep in closer relation, he decided to take a course in anatomy, which he followed with such great interest, that it finally led him to study medicine and give up his original resolve of becoming a lawyer. At first he spent two semesters at the University of Bonn; later he migrated to the University of Berlin, where he remained until 1862. Dr. McGraw's intention was to complete his studies in Berlin, but when the Civil War broke out, his sense of patriotism prompted him to return to the United States and espouse to the cause of the North. After reaching his native land in 1862 he matriculated in the College of Physicians and Surgeons in New York city and after a year of intensive application, he graduated as a doctor of medicine in 1863.

Immediately after graduation he spent the first few months as a contract surgeon for the U. S. Army and was stationed at Jefferson barracks in Missouri. Here he found conditions entirely different from what he had anticipated; he was far away from the seat of war activities; the surgical experience he yearned for was not sufficient to satisfy the ambitions of the young surgeon. With the desire of accomplishing greater things and broadening the scope of his medical knowledge, he applied for a commission as surgeon of the U. S. Volunteers. He passed this examination with credit and was commissioned as assistant surgeon with the rank of a first lieutenant.

His first assignment was at Chattanooga, being put in charge of a surgical ward of the military hospital. In Chattanooga he also at one time had the superintendence of a smallpox hospital. From the hospital in the valley he witnessed the battle of Look-out Mountain. Toward the end of the war he was assigned to the staff of General J. H. Wilson, and accompanied him in a cavalry raid through Alabama. In the latter state he was left in charge of some wounded soldiers in a small town, where he was captured by General Forrest of the Confederate army, but was soon afterward released on parole. At about this time the war was at an end and the young surgeon, pre-eminently equipped with the best knowledge and experience of the time, returned to Detroit to take up the private practice of medicine and surgery.

On July 10, 1866, Dr. McGraw married Alice Simpson in New York city, returning to Detroit immediately. He began his practice near the corner of Jefferson avenue and Riopelle street, in the house which his father gave him as a wedding present. Physicians with the thorough medical training that Dr. McGraw had, were scarce, and he became a leader of the medical profession in Detroit. In those days physicians received annual fees from families, kept on the most intimate terms with the family and were esteemed as the family physician, confidant and advisor. In speaking of the customs in his early practice, Dr. McGraw said: "We hear now of paying the doctor to keep the community well. It was tried and has not been a distinguished success. When the child of an old and aristocratic household had a trivial sore throat, the doctor would be routed out of bed in the morning, urged to come again at noon and again at night to satisfy the solicitude of a nervous mother. The family physician was a reality then. In some respects it seems to me we have lost since that day, and in others gained. The rewards of the profession are better, but there has been a loss on the side of idealism. The modern doctor, mostly ahead of the old school in his scientific attainments, has been touched by the spirit of the commercial age." At another time he remarked, that during his first month of practice he did not make ten dollars.

Medical education at that time was in a deplorable condition; there were no facilities or inducements for the student of medicine; medical teaching was crude and primitive and the capabilities and scientific standard of the average doctor was low. Through-

out the entire state of Michigan there were no medical schools of high standing. Dr. McGraw conceived the idea of founding a medical school, and in collaboration with his lifelong friend Dr. Edward W. Jenks, and through his indefatigable efforts, the Detroit College of Medicine came into existence in 1869.

Like most surgeons, Dr. McGraw at first was a general practitioner and gradually drifted into surgery, the specialty for which he had been particularly trained in the practical school of warfare. At the Detroit College of Medicine, he was professor of surgery until he retired. In 1885 when a complete reorganization of the teaching faculty took place, Dr. McGraw was elected president, which position he efficiently held for many years. For a long time he was surgeon to Harper and St. Mary's Hospital, but came to the conclusion that he could not conscientiously do justice to both institutions. He could not give the necessary time and attention to the needs of his patients at both hospitals, and therefore confined his work to St. Mary's. His activities at this institution extended over a period of 45 years. He, however, remained on the consulting staff of Harper Hospital until his death.

The reputation of Dr. McGraw as a surgeon, was international in its scope. He was a thorough student and a master of his specialty; a prolific writer and a recognized authority on surgical subjects. Some of his best contributions to medical literature were, the chapter on "Tumors" in Bryant and Bucks Surgery, Vol. I.

"Upon the Use of the Elastic Ligature in the Surgery of the Intestines," 1891.

"A New Method of Reducing Old Dislocations of the Lower Jaw," 1899.

"The Education of the Laity in Medicine," 1900.

"Gastro-Enterostomy by the Elastic Ligature," 1901.

"The Use and Limitations of the Elastic Ligature in Intestinal Surgery," 1901.

"Some Practical Considerations on Tumefactions of the Climacteric Breast," 1903.

"Practical Considerations on Intestinal Anastomosis," 1903.

"The Value of Statistics in the Study of Cancers," 1905.

"Some Unsettled Questions in the Treatment of Hare Lip and Cleft Palate," 1908.

"The Prophylaxis of Cancer," 1908.

"Aneurysms in Young People," 1909.

"The Statistics of Cancer," 1910.

"The Use of the Finger in Rhinoplasty," 1910.

At the forty-second annual meeting of the American Medical Association, held at Washington, D. C., May, 1891. Dr. McGraw delivered the chairman's address before the Section on Surgery and Anatomy "Upon the Use of the Elastic Ligature in the Surgery of the Intestines." This was the first public announcement to the profession of the McGraw elastic ligature. This method of anastomosis was discussed in most surgical conferences and journals and accepted by many of the world's leading surgeons. The method for intestinal anastomosis introduced by Wolfier was in vogue with some German surgeons, but was not recognized in America and England until Dr. Senn had modified the technic and demonstrated its usefulness. Since that time American surgeons manifested great interest by endeavoring to improve the method of operating. From the spring of 1890 until 1891, Dr. McGraw with his able assistants, Drs. Ives, Ireland, Hickey and Warren, experimented perseveringly to bring the elastic ligature to a successful outcome. The result was epoch making, and placed the name McGraw with the foremost surgeons of the age.

The local medical fraternity recognized a colleague of unusual surgical attainments in Dr. McGraw and every position of honor and appreciation was conferred upon him. There were no local limitations to the recognition of his ability. He was vice-president of the American Medical Association and vice president of the American Surgical Association. In 1905 the University of Michigan conferred on him the honorary degree of Doctor of Laws in recognition of his services as educator and scientist. He was president of the former Detroit Medical and Library Association; the Wayne County and Michigan State Medical Societies; he was a member of the Detroit and Country Clubs, Loyal Legion, Board of Commerce, Christ Episcopal Church and St. Pauls Cathedral.

As a teacher, Dr. McGraw was superlatively successful. He had the enviable reputation of being the best teacher in medicine and surgery Detroit has ever known. His lectures were attended with interest; the student felt the magnetism of his personality; his erudite diction was singular; his faculty of imparting knowledge to his hearers was exceptional, his description, analysis, discourse, and persuasion were a

revelation; his disquisitions, especially those pertaining to tumors, were well correlated masterpieces and really classics of his time. Two classes of maladies always seemed to receive particular attention and emphasis, as those who served as internes will bear witness; the timely and radical removal of cancer and the very early operation for intestinal obstruction. He was methodic in all his undertakings, which was even a characteristic in his gait.

Dr. McGraw preached constantly longer and more thorough training for physicians particularly surgeons, and condemned the tendency of attempting major operations by those not sufficiently educated and prepared. He said: "Modern methods of surgery admit of such radical procedure that the young surgeon is inclined to lose his respect for the human body. He thinks he can cut in at will and produce sweeping cures immediately. Patients share this notion to a large extent and are eager to submit to major operations, which they have come to regard as trivial. Special equipment should be required of the surgeon. The young graduate in medicine should not be permitted to exercise his zeal for operating until he has perfected himself through assisting older men. I believe a law calling for a special degree would be of value."

His enthusiasm and concern for the welfare of his patients was appurtenant to his conscientiousness. It mattered not whether the patient was wealthy or a pauper, and even in the last years of his active practice he could be seen wending his way to the hospital at any time of the day or night to succor the suffering and minister his surgical skill to the poor and city patients.

No matter what aggravating circumstances arose at the operating table, whether hemorrhage or shock, he was always calm, deliberate, and fearless; in the lecture room, at the bedside, at the operating table, always master of the situation. With his patients and fellow practitioners he was upright and straightforward in all his dealings.

Wherever science and surgery is cultivated, the name Theodore McGraw is honored. The contemporary of a great band of surgeons, in a scientific and surgical age, he held a prominent place among them and was revered by them all, be they who they might. Throughout the entire state and in many parts of the globe there are heirs of his labors, who are grateful and venerate the man whose name they have heard but with praise. To his friends he was vener-

able as "the best man they had ever known," but it is rarely said so often in the case of one physician as it is in Dr. McGraw's. His professional career and his labors in the field of surgery form that link between his life and that of society at large, which justifies the title of benefactor to the human race. He has been called so by hundreds of firesides, and wherever scientific men meet together in the short time which elapsed since his death. We have no doubt the title will be ratified by all who may become acquainted with the history of his life.

There was no pedantry in his work any more than in his knowledge. He was too seriously engaged for gossip, but had minutes or hours to bestow, where they really could do good. He had conscientious thought to spare for other people's affairs, and modest sympathy for their interests, and intrepid advice when it was asked, and honest rebuke when it was deserved and might be effectual. His unobtrusiveness was, perhaps, the most striking quality of his manner to observers who knew what was in him. His piety, reverent and heartfelt, was silent, as he preferred that of others should be.

His domestic affections were unconcealable; but spoken sentiment was quite out of his way. His happy marriage ended in a mingling of pain and tolerance which touched the hearts of all witnesses. Never was so much understood with so little said. Now that both are gone, it is right to present this feature in the character of a man so long before known as physician and as savant. He lived, however, to see his children fulfilling their own career of labor and honor; a son, a physician of great merit, a daughter the kind mother of four children and the spouse of an attorney.

Nothing can preclude any one of the honors due to such a man as Dr. McGraw, who was not only a priceless treasure to his professional friends, but a benefactor to suffering humanity.

The popular benefits of scientific developments always bring about a grateful recognition of the originator, sooner or later, but such tardy honor is not enough. Those who understood what society has lost in the life and by the death of Theodore McGraw should say what they know of him, that he may be mourned as he deserves, and that future generations may not inquire in vain how so great a man lived and died.

Necrology Committee,

Dr. Joseph H. Andries,

Chairman.

Doctor S. John Fraser was born in Goderich, Ontario, in 1857 and died in Detroit, September 30, 1921. He graduated from the Michigan College of Medicine in 1885 and began his practice in Newberry, Michigan, where he was City Physician. After eight years, he moved to Detroit.

He was a member of the Wayne County Medical Society, Michigan State Medical Society, American Medical Association, Odd Fellows, Knights of Pythias, Independent Order of Forresters, and First Presbyterian Church.

Doctor Fraser married Miss Emily Durand of Toronto in 1885. The Doctor is survived by his widow and two daughters, Mrs. Clarence Felter of New York and Mrs. John Lauver of Dayton, Ohio.

Doctor J. D. Riker was born in White Lake in 1866 and died in Pontiac, October 8, 1921. He graduated from the Medical Department of the University of Michigan in 1890. He settled in Pontiac and practiced medicine there till his death.

He was prominent in Masonic, Pythian and Elk circles. In 1904 he was elected Mayor of Pontiac and served one term.

He is survived by his widow and four sons.

County Society News

WAYNE COUNTY

The regular meeting of the Wayne County Medical Society for 1921-1922 was held Monday evening, September 19, 1921. Approximately 150 were present.

The officers for the year are Dr. James E. Davis, President; Dr. James H. Dempster, Vice President; Dr. Bruce C. Lockwood, Secretary; Dr. Arthur D. Holmes, Treasurer.

At this first meeting Dr. Harold Wilson presented the retiring president's address. He commented on present-day medical activities, compared the present-day doctor with the old time family physician and deplored the fact that so much State medicine was creeping in upon us and warned the medical profession that some action should be taken to fight this evil.

Dr. Frank R. Starkey presented two cases, one of anteropoliometis presenting exophthalmus of the right eye, the other, one of C. S. Lues presenting exophthalmus.

The officers and Committee Chairmen for 1920-1921 read their reports at this meeting.

The Necrology Committee through Dr. Jos. Andries, Chairman, read a memorial to Dr. Theodore A. McGraw, in which he gave his life history, his contributions to medicine, etc. Drs. Robbins, Hitchcock and Dempster spoke of the rare good qualities of Dr. McGraw and the esteem in which he was held by all who knew him.

The first meeting of the Surgical Section of the Society was held Sept. 26. Dr. Alex W. Blain read a paper on Group Medicine vs. State Medicine.

The second general meeting of the Society was held Oct. 3, 1921. Approximately 260 were present. This evening was devoted to Education of the Public in medicine. Mr. Cody, superintendent of schools of Detroit, was present and gave us an interesting talk with reference to standing of the medical profession among the laity as compared with earlier years. He thought our standing not quite as high, at least it was different, due to the fact that we had not been educating the general public as to our many advances in medicine. He recommended that

more general information be disseminated, and invited the medical profession to use the schools for this purpose.

Dr. James A. MacMillan, Chairman of Public Education Committee of the Society, then gave an outline of contemplated campaign for instruction of the public as recommended by that Committee. This subject was also discussed by Mr. Rivette, principal of the Northwestern High School, by Drs. Biddle, Guy L. Kiefer, and others. Dr. Don M. Campbell thought that we should not try to do the teaching ourselves, but to influence the schools to make physiology and hygiene a more popular subject. He did not believe that the standard of the medical profession of today had gone down but that on the other hand we had made so many advances and so much progress that we had risen above the clouds, so to speak, and that the public did not always understand us.

The president, Mr. Davis, announced and made an appeal for co-operation during the week of Oct. 31-Nov. 5, which is to be "Cancer Week," devoted to the dissemination of knowledge regarding the disease in our schools, theater buildings, etc.

ADDRESS OF THE RETIRING PRESIDENT

Delivered Before the Wayne County Medical Society, Sept. 19, 1921.

By Dr. Harold Wilson

It is one of our somewhat curious customs that your late presiding officer, although officially dead and buried for some months, should be permitted at this time to suffer a transitory resurrection. A resurrection so brief however, that with the certainty of an immediate re-interment, he is moved to utter the cry of the Roman gladiator. "We who are about to die salute thee," and lest there be many among you who would at once turn down your thumbs, he hastens to say that his salutation will not be overlong.

First, may I express my appreciative gratitude for the honor you were so kind as to bestow, and my regret that the fruits of my administration were not more ample. The problems of the doctor, both in private and in public, appear to multiply and to grow more complex. Medical organizations become less simple; their functions increase and differentiate. Time was when a medical society was little more than a loose fabric wherein physicians sought for mutual progress in the practice of medicine, by the discussion of its science and art. It was a bare and formal thing. Such was our own society not long ago, and now—we have made it a civic and a social institution. We are developing its possibilities as a means of obliterating professional antagonisms and misjudgments—of promoting a friendly and generous brotherhood among its members. We are creating an instrument for the preservation and maintenance of public health. We have entered the lists of legislation and politics where we joust with those who seek to do us harm. We are building a medical library for the preservation of knowledge. We are keeping open the printed avenues of communication not only between ourselves, but also with the public. We are attempting to co-operate with other instruments operating to promote the progress of medicine, and finally, we are wrestling with those intimate problems which relate to the maintenance of our individual livelihood.

With such complicated functions to perform, perhaps we can expect no more than to move slowly. It is surely more important to move wisely

than swiftly, and even this, we may not accomplish. I wish to discuss with you some of the obvious problems that we have to face, or at least to make passing comment on some aspects of our present status quo.

Since co-operative effort is the means of progress in civilization, it would seem obviously necessary for the medical profession to preserve and develop its organizations, and to keep them mutual and democratic. Thus this society, whose entrance upon another year of existence we mark by this initial meeting, enters vitally into the private welfare of each of its members. Without it we are an unco-ordinated multitude; with it, we become a conscious force in the community. I cannot urge you too strongly to assist in its preservation.

It would seem reasonable then, to believe that such an organization as ours is a logical necessity to the medical profession which would disintegrate without it. It would seem reasonable also to urge its members toward its loyal support, so that it might keep its place among the machinery of civilization. I am rather disposed in fact, to idealize its importance. Yet I wonder if after all, the day of ideals in medicine is not rapidly passing away. There was a day not long ago, when the physician invested the profession of medicine with a certain dignity and importance of which he himself shared something. There was a common feeling of noblesse oblige, which led its possessors toward high thoughts and high ideals—toward honesty and uprightness and gentleness and wisdom—toward the fulfillment of every obligation demanded by sick and suffering humanity. It led them to hard unpaid labor, to tasks of pity, to self sacrifice. You recognize the portrait as that of a doctor of the old school, now an historical figure, almost a tradition, scarcely an inheritance.

It is the absence of such a feeling that tends to breed a race which gathers wealth by the exploitation of medical or surgical fashions, a race whose creed is written in answer to the question "What is there in it for me?" a race which in its ultra-science from another aspect, classifies human beings by case numbers and the nomenclature of diseases; which institutionalizes the practice of medicine until it is almost de-individualized, and which brags of the number of its patients and the size of its income tax. It tends toward a new breed of doctors, who, brushing the dust of their medical ancestors from their business clothes, are disposed to regard these ancient gentlemen as rather sad birds.

I do not feel sure that it is not old fashioned or academic to talk of ideals that are out of style. They say that in Russia it is being discovered that people do not desire to live in an ideal social state, and that the strongest moving force in the world is self interest. Possibly this is true everywhere, even among doctors. It would be silly to urge a body of intelligent medical men to be unselfish and to labor for the common good without reward, if so to do was in contradiction to their fundamental human nature. I cannot quite believe that it is, yet I recognize the fact that the cultivation of a quite unadulterated selfishness is by no means the mark of failure in medical practice. On the contrary, we all know not a few medical men in our own community who have so thoroughly attended to their own affairs that both their prestige and their incomes have grown great, yet I question whether they have not grown fat and prosperous, as do other parasites, on what has been supplied by others who were less selfish, and further, whether the whole fabric would not collapse were those less selfish to cease their disinterested labors.

There is, moreover, not only the selfishness and indifference of individuals, but also that of groups. I am tempted to believe that the medical profession

as a group is indifferent and often even hostile to many efforts made for its benefit. If a few concern themselves to defend the profession against destructive legislation, for example, is it not true that the many do not trouble themselves even so much as to ascertain what it is all about? If a few sacrifice their time and strength in constructive work for the profession, is it not true that they are faced with the accusation of self-aggrandizement? Yet we cannot all concern ourselves with public affairs, we have too many private interests which need attention, and I do not wish to criticize an indifference which is not altogether unjust. If my wife needs a new dress or my children new shoes, I am apt at the moment to be more concerned with my private business than with public affairs. Making allowance, however, for these moments of private pre-occupation, I think it is fair to say that the obligation of public service does not weigh heavily on the soul of the average doctor, nor for that matter, on the soul of the average member of any social group. I doubt if it will ever be otherwise. There will be a few idealists whose reward will consist in an occasional feeling of self satisfaction, and there will be many realists whose reward will be a material prosperity very comfortable to contemplate, and still more comfortable to enjoy.

We had a committee on Public Health last year. Two letters were sent to its chairman begging that the committee might be organized and made active in the consideration of pressing problems. There appeared to be a sufficient number of matters properly within its jurisdiction crying for consideration. For reasons best known to its chairman, no response was made to either letter, nor a single meeting of the committee held. We were merely regretful at the lack of courtesy, but we were sorely betrayed by the lack of helpful co-operation. I am deeply grateful to those others who gave themselves freely in the discharge of their obligations. Our legislative committee gave us vital assistance on several critical occasions, and every member of the profession is in debt to it.

The problems of our earnest and hard working Library Committee have been acute and difficult. To many of us the maintenance of our medical library and its growth into a really great institution, is a cherished hope. Many of us believe that for these ends, its continued existence as an integral part of this society is essential, and we look upon any movement to place it anywhere but under our own roof, as a calamity. But in order to avoid this calamity it is necessary that we have the money needed for its continuance. I beg to ask you to give it your material aid.

The society itself has felt the pinch of hard times, and the burden of your Trustees in equalizing expenditure and income is a heavy one. We are faced too, with the growing problem of adequate housing for the society. Since we acquired the property we now occupy the society has grown greatly, and its need for space has increased. We need more room and the incoming administration will find this need becoming more and more imperative. You must assist in its solution.

Last year the first steps were taken toward utilizing the residue of our "Patriotic Fund" as the nucleus of an endowment in perpetuity for the establishment of a lecture foundation. I believe that such use of this money would be both commendable and of much advantage to the society. I hope that the plan may be consummated during the coming year.

Nearly a year ago the president of the University of Michigan invited the medical profession of this state to attend a conference—so-called—at which the proposed plans of the University relating to its

medical department were to be presented and discussed. These plans were presented, and they were discussed. Those of you who were then present will recall the occasion quite distinctly. In brief, the president was informed that the plan proposed would not meet the approval of the medical profession. Since then the legislature of this state has granted money for the completion of the university hospital, but if there has been any change in the plans of the president or the Board of Regents as to how that institution was to be conducted, I am not aware of it. More than 50 members of this society attended this meeting. Some of them joined in the outburst of antipathetic oratory. I have not heard as much as a peep from any one of them since that time, yet it was then clear that the University of Michigan proposed to enter the private practice of medicine and surgery, using its prestige and its faculty to compete with the private medical practitioner in this state. Have we grown to believe that this is a proper function of the State, or are we merely thoughtlessly indifferent? If we still care, and if our opposition is not dead, I suggest that the issue be revitalized. I do not know what the present plans of the University may be. The president may have harkened to the voice of the poor and rather inconsequential doctor whom we may call "extra-mural" to distinguish him from those within the portals of the university—and may have decided to limit the activities of the new hospital to the relief of the sick poor of the state so as not to impair the livelihood of these outside doctors, as generally inferior as they may be in scientific attainments. I am so fearful, however, that this is a dream and not true, that I venture to suggest a letter be sent from the president of the Michigan State Medical Society, or indeed from our own president, or from others who may be so inclined, addressed to the president of the university or the Board of Regents, requesting information as to what are the present plans of the University as to the care and charges for service to private patients in the University Hospital. It would be a poor commentary on our sincerity were this matter to be left without further action on our part.

During the past year there was an active propaganda on the part of the Detroit Board of Health for the erection of a 1000-bed hospital. There had been no careful survey of the existing hospitals and other agencies for the care of the sick. The so-called "survey" made by the Bureau of Governmental Research was little more than a comic opera contribution. There had been gathered no data adequate to determine either that more beds were really needed, or how many, or of what sort, or under whose control they might properly be placed if provided, with the exception that it could be shown that the provision for the care of contagious diseases, and probably maternity cases, was insufficient. Further than this, the argument was largely an assemblage of glittering generalities, such as the number of beds per thousand in other cities, together with the vague offer of free access to the privileges of the hospital, to certain doctors some of whom had cried loudly because they had found practice in existing institutions difficult. Private patients were to be taken care of at lower rates and under "more modern conditions" than could be found in the average existing hospital. Altogether, the campaign was carried on skillfully, and when a meeting of this society, called to consider the proposed plans of the Board of Health, the chair endeavored to initiate some effort to study the existing conditions in order to gather enough facts to make possible an intelligent opinion as to what needs there were and how they could best be met, you declined to concern yourselves with such a proposal and more than

intimated ulterior and secret motives on the part of our chairman in suggesting it. So the electors of this city were presently privileged to express by vote their opinion as to the need for, and the wisdom of building a \$3,000,000 City Hospital, and I can imagine the gods on high Olympus roaring with laughter at the idea of such an opinion having any rational value. I fear however, that we may discover hereafter, that we have in this matter added a link to the claim of state medicine which some day will clog our freedom and stop our progress. On every side, in the direction of Health Insurance, the state regulation of fees, the state supervision of venereal and other communicable diseases, the establishment of state clinics for the care and treatment of various types of disease, the supervision of motherhood, the health of school children, the control of alcohol and narcotics, constant efforts are being made to place the medical profession in fetters from which it will never escape.

Last year it is said that 17,000 school children in Detroit were certified by school employed physicians to be in need of treatment or operation for tonsils and adenoids. At this moment our hospitals are being asked to speed up their surgical machinery for the rapid removal of these organs, so that those of this number not already accommodated may be taken care of. These children are sent to our hospitals and dispensaries if not with a ready-made diagnosis, at least with the definite conviction in the minds of their parents that an operation is required. Not to have had their children's tonsils and adenoids removed, has almost become a sign of gross parental neglect. The school doctor's opinion has become so weighty, that if an attending hospital or dispensary clinician bravely decides against an operation, his judgment must be fortified by the concurrent opinion of two of his colleagues. This is the pass to which we have already come. Would you say that the Board of Health or the Board of Education have or have not entered the field of medical practice. Or if the answer to this question is still uncertain, how about the Board of Health Clinics, venereal and otherwise? Or if you like, the care of non-indigent patients in the Receiving Hospital, by another city commission?

We will agree that there is a large number of sick people in every community who are proper subjects for community care, whose sickness and health involve the community as such, in a more or less definite obligation. But we have not yet troubled ourselves to find out who or how many they may be or what provision should rationally be made for their care. I am not at all sure that we ever will.

I understand that the authority to issue bonds for the erection of the Board of Health Hospital is to be a subject for action by the Common Council of this city at a near meeting of that body. I have no reason to know that this society does not still stand committed to this proposal; and from my own unhappy failure in essaying the art of persuasion when the matter was last before you, I shall not repeat the attempt. It seems almost incredible however, that we are willing to rest supinely twiddling our thumbs as the executioner approaches. After we have been decapitated, there will be a long time in which to think it over. It is said that there are some who think quite as logically after decapitation as they did before.

But if we make formal objection to the erection of the proposed City Hospital, are we prepared to offer any plans for the care of community sickness? Are we making any organized effort to meet the activities of the socialists, bolsheviks, professors of economics, ignorant women and men intoxicated with the prospect of political power, labor agitators

and the like, who are finding money and leisure to carry on a constant propaganda to limit the doctor's freedom? Are we doing anything to regulate those among ourselves who take a selfish advantage of our present liberties by making exorbitant charges for immaterial service, or who prostitute technical operative skill for the sake of fees? Have we taken steps to equalize the burden of community service? Or do we continue willingly to permit a few to grow fat while others labor without pay to make it possible?

Well, personally I do not think we have done any of these things. Small blame to the public then, when it revolts against a medical profession in which it sees those of good standing commercializing their skill, or possibly capitalizing their ignorance to wring dry the pocket books of their patients.

This is by no means the empty rhetoric of a retiring president. I have no wish to deprive the doctor of a decent living. I do not object even to his fighting against curtailment of his income, which heaven knows, is usually small enough. More power to him. But I wish his living to be both decent and honorable.

If we do not ourselves see to it that the public pays for our services only what it considers just and right, it will secure protection by legislation. The fees for medical service will be regulated by law. It is the privilege of any commonwealth to pass laws of this type.

The public will squander money on almost anything except the doctor.

We have in our own city an institution, which if rumor is to be believed, owes its birth to this feeling of revolt against alleged extortionate fees for medical service. An institution, the future of which I am quite unable to predict, but which at present is so well advertised, that the public has come to believe that it offers nothing but the highest type of medical and surgical skill and at a cost to the patient much below the market price of the private practitioner. Such a belief is a valuable asset to any institution, but whether this one survives depends more upon the wisdom of its management and the continuance of the condition in medical practice to which it was reactionary.

Ignorance and credulity are the common prerogatives of the public and are nowhere more evident than in matters relating to the treatment of disease. To explain disease and its cure by "anatomic dislocation," or "vertebral subluxations," or "false thoughts," or "indigestion," or "colonic stasis," is as acceptable to the public mind as any talk about cellular pathology, infection and immunity, or biochemistry. The popular estimate of any doctor is more apt to be grounded upon some irrelevant and immaterial circumstance than upon his education and intelligence. The amount of money which the public spends upon worthless drugs, dishonest "cures," ignorant manipulators and fakirs of various sorts would maintain an educated medical profession in affluence.

It is certainly sad to see all this money going in another direction. So sad, that not a few doctors make a business of going out after it themselves. If it is the unalterable way of the world to grab off all one can get and carry away; if the one fixed and unchanging human quality is self interest; if the talk about human welfare, civic and social conscience, one's duty to others and so on, is bunk, there are some of us who have wasted much time and opportunity. My own belief is that the standards of conduct and the road to happiness are found nowhere but in each man's heart, and to quote an old saying, "that which is the breaking point for one, is the hanging point for another."

CALHOUN COUNTY

The seventh regular meeting of the Calhoun Medical Society was called to order at the Post Tavern dining room at 7:45 o'clock, Tuesday evening, September 6th, by President Shipp.

The minutes of the last meeting were approved as printed in the bulletin.

Bills were received from the Phoenix Printing Company: September bulletin, \$6.50; extra cards for the June meeting, \$3.50; total \$10.00; from Coggan, the florist, flowers for Van Camp and Landon, \$8.00; from Dr. Haughey, dinner for Dr. Freund, \$1.50, postage September bulletin, \$1.50. These bills, after being approved by members of the board of directors present, were upon motion, ordered paid.

Communication was read from daughter of Dr. Green of Spring Arbor, reporting his death a few days previously.

By motion of Dr. Hafford, this communication was referred to Dr. E. L. Parmeter of the Necrology committee with the request that he write a letter to the family expressing our sincere sympathy and that a copy of this letter be published in the next issue of the bulletin.

Several miscellaneous communications were read and accepted.

Announcement was made of a meeting of the program committee to be held within a few days.

Dr. Eggleston, for the program committee, introduced Dr. Hugo Freund of Detroit, who gave the society a very interesting discussion of Hyperthyroidism in which he classified the disease into various classes and suggested treatment.

This paper was discussed by Drs. Squire, Eggleston, MacGregor, Mortenson, Gorsline, Kingsley, Riley, Wafer, Shipp, Hafford, Sr., Gubbins, and the discussion closed by Dr. Freund.

Attendance at the dinner, 27; at the meeting, 40. Meeting adjourned.

Wilfred Haughey, Secretary.

BAY COUNTY

After the summer months of inactivity the Bay County Medical is planning a strenuous fall season.

The first meeting will be held Thursday, Sept. 29th, when Dr. Bruce of Saginaw will address the society.

Oct. 24th a joint meeting will be held with the Bay City Dental Society to discuss the subject, "The Physician and the Dentist."

Dr. La Ferte, Detroit, will deliver a paper on "Orthopedic Surgery," Nov. 28th.

Other dates and speakers have not yet been decided upon but interesting and inspiring programs are in the making.

The regular meetings, like those of the Service Clubs, will hereafter be "Luncheon Meetings" and will be held at noon. The idea promises to be a popular one and will undoubtedly stimulate new interest.

The local society is beginning a campaign against the "quacks and healers" in our midst and lively proceedings are in prospect.

The first fall meeting was held at noon, Thursday, Sept. 29th. The "Luncheon Meeting" at noon promises to be a big success. There were 40 members present and the paper was delivered by Dr. J. D. Bruce, Saginaw. The topic was "Peptic Ulcers." The well prepared paper was thoroughly discussed and appreciated.

Dr. F. W. Baeslock, Detroit, will address the

next meeting, Oct. 10th, on "Experimental Syphilis With Relation to Its Clinical Manifestations."

The society is proceeding with the prosecution of George Heimberg, the medicine man of Bay City. The case comes before the circuit court in December

L. FERNALD FOSTER,
Secretary.

SAGINAW COUNTY

The October meeting of the Saginaw Medical Society was held Oct. 7th at the Lincoln Club. The subject of "Peptic Ulcer" was very ably presented by Drs. J. D. Bruce and B. B. Rowe. The papers brought out an interesting discussion which made the meeting a very helpful one.

The society voted to continue to use the Lincoln Society rooms as its meeting place.

Dr. Ling of Hemlock has been appointed County Physician. He will move to Saginaw shortly.

Extensive plans have been made for the Cancer Week campaign. The subject will be presented to over 40 organizations who will be instrumental in getting a good crowd out for a mass meeting—at which the subject will be presented by some well known speaker.

Dr. Allen, chief of our new Central Laboratory, is getting his work well under way. He has the central Laboratory in good working order and has established branch laboratories in each of the three hospitals.

R. M. KEMPTON,
Correspondent.

GENESEE COUNTY

The Genesee County Medical Society met on Wednesday, Oct. 5th, 1921, President Orr presiding. Nominations were made for the officers of 1921-22. Dr. R. R. Smith of Grand Rapids was introduced and gave a splendid address on "Visceroptosis—the present-day conception of it and what we do to solve the problem." The lecture was illustrated by lantern slides and evoked a spirited discussion. The society has made plans to co-operate in the Cancer Week program.

At a meeting of the Genesee County Medical Society held Wednesday, Sept. 21st, Dr. George F. Muehlig of Ann Arbor spoke on "Chronic Ulcerative Colitis." His paper was based on his experience with this disease while he was attached to the Mayo Clinic. He gave a complete but concise review of the disease, described the technical methods used in making a diagnosis, and outlined the medical and surgical treatment.

The Genesee County Medical Society met on Wednesday, Oct. 19th, President Orr presiding. Dr. Harry B. Schmidt of Detroit gave an excellent talk on "The Anemias of Pregnancy." Of interest were the splendid results obtained in his series of cases by early diagnosis and treatment by blood transfusion.

The secretary's annual report brought out the information that 28 meetings had been held during the year. At these meetings papers were contributed by 20 out-of-town speakers and 30 by local speakers.

The following officers were elected for 1921-22: President, F. B. Miner; vice president, W. H. Winchester; secretary, W. H. Marshall; treasurer, A. C. Blakely; medico-legal officer, C. Moll; directors, B. E. Burnell, Noah Bates, C. H. O'Neill, H. E. Randall, J. G. R. Manwaring; delegates to the State

Society, C. Moll, J. C. Benson; alternates, W. H. Winchester, D. D. Knapp.

W. H. MARSHALL,
Secretary.

TUSCOLA COUNTY

Tuscola County Medical Society met at Caro, Mich., Sept. 21st.

Dr. J. D. Bruce of Saginaw, Mich., read a paper on "Medical Treatment of Gastric and Duodenal Ulcer." Dr. B. B. Rowe of Saginaw, Mich., read a paper on "Surgical Treatment of Gastric and Duodenal Ulcer." Both papers were very good and were very carefully prepared. Discussion of papers followed, led by Dr. Q. D. McCoy of Cass City, Mich.

A general discussion of enlargement of society clinical material was led by Dr. McCoy of Cass City, who urged a more extensive program with clinical material in connection with each paper read.

An amendment to the by-laws was presented, making the fees \$7.00 a year, \$5.00 for State Society and \$2.00 for local society.

H. A. BARBOUR,
Secretary.

State News Notes

COLLECTIONS

Physicians Bills and Hospital Accounts collected anywhere in Michigan. H. C. VanAken, Lawyer, 309 Post Building, Battle Creek, Michigan. Reference any Bank in Battle Creek.

Lake View—Beautifully situated, one-third mile lake front, among century old trees. Boating, bathing, fishing. Large, handsome colonial mansion. Baths, steam heat, every city convenience. Orchard, vineyard, complete country estate of 18 acres adjoining village. Ideal location for physician, hospital or sanitarium. Frank Nelson, Paw Paw, Michigan.

Practice for Sale—Excellent opportunity for surgeon or obstetrician with executive ability to obtain controlling interest in small up-to-date hospital in Detroit. Will also consider partnership. Call Cherry 3334. Mr. Glicman, 614 Free Press Bldg., Detroit, Mich.

Full-time resident physicians are required for Michigan in connection with this department's supervision of penal and correctional institution medical work. Opportunities now for two men and for one woman physician. Salaries, \$1,800-\$3,000 year and maintenance. State age, nationality, married or single, education, present employment, references. Personal interview preferred. Deputy Commissioner, Michigan Department of Health, Lansing, Mich.

A middle western state department of health requires a full-time physician for its traveling tuberculosis clinic. Clinic spends week in each county. Consists of a children's unit and a tuberculosis unit. Only physicians with special training in tuberculosis work considered. Salary \$3,000 year and expenses. No. 123, Journal, M. S. M. S.

Practice for sale. House, barn and good will of practice, in town of 750, Southern Michigan, for reasonable price of property. No opposition. Box 171, Grass Lake, Mich.

The following officers were elected by the American Academy of Ophthalmology and Oto-Laryngology at its annual meeting, held in Philadelphia, Oct. 19, 1921: President, Dr. W. R. Parker of Detroit; treasurer, Dr. S. H. Large of Cleveland; secretary, Dr. L. C. Peter of Philadelphia, and editor of transactions, Dr. C. Loeb of Chicago.

The regular meeting of the Detroit Society of Internal Medicine was held in the University Club, Oct. 24, 1921. The main presenter was Dr. A. F. Jennings ("Efforts Syndrome Simulating Metral Stenosis," with report of three cases and autopsy); the literature presenter was Dr. G. E. McKean, and the clinical presenter was Dr. J. T. Watkins.

The Detroit Medical Club held its first fall meeting Oct. 20, 1921, at the Medical building, Detroit. Dinner was served at 6:30, which was followed by the address of the retiring president, Dr. E. M. Houghton. The officers for the ensuing year are: President, Dr. R. C. Jamieson; vice president, Dr. W. J. Stapleton, and secretary-treasurer, Dr. Stuart Wilson.

Archibald McGilp, a Pontiac chiropractor, was found guilty of illegally practicing medicine Oct. 18, 1921, under the ruling of Circuit Judge Gillespie of Pontiac. Judge Gillespie, after hearing the evidence, directed the verdict of guilty. Under the court's decision, which followed a state supreme court ruling, chiropractics is the practice of medicine and surgery and those practicing it must register. McGilp was not registered, either as a physician or drugless healer. The evidence showed that McGilp performed the usual chiropractic treatment of the spine. "Under the supreme court ruling," said Judge Gillespie, in his charge to the jury, "this is held to be the practice of medicine. Where the evidence is undisputed, as it is in this case, I must direct a verdict of guilty." The jury was out 10 minutes, following this charge. Dr. B. D. Harrison, secretary, and Mr. Henry Montgomery, attorney, represented the Michigan State Board of Registration in Medicine at the trial.

Butterworth and Blodgett Hospitals graduated two large classes of nurses from their training schools. Exercises were held during October.

Dr. J. T. Case of Battle Creek gave a talk before the staff of Butterworth Hospital on Oct. 7.

Dr. B. H. Van Leuven of Petoskey has been elected a member of the City Commission.

Dr. J. B. Jackson of Kalamazoo was the essayist of the evening at the first fall meeting of the Kent County Medical Society.

The January issue of the Medical Review of Reviews is to be sent as a New Year's gift to practically every physician in the United States and Canada. This issue will be one of the most valuable which has ever been prepared and we trust that the physicians who receive this number will read it with interest and profit.

We congratulate the Medical Review of Reviews on this progressive move and trust they will meet with success in a great undertaking.

The Detroit Ophthalmological and Otological Club held their regular meeting at the Medical building,

Oct. 5, 1921. Following the dinner, given by Dr. L. E. Maire, the doctor read a paper on "Soemmering and Contemporary Anatomists."

The registrations this fall in the University of Michigan Medical School and in the Homeopathic Medical School are 557 and 62.

The following Detroit physicians are members of the Meadowbrook Country Club: Doctors J. L. Asselin, L. I. Condit, Ray Connor, G. C. Duggan, E. H. Hanna, T. B. Henry, C. S. Kennedy, D. M. King, C. E. Lemmon, L. A. Murray, G. P. Myers, J. C. Russell, H. L. Simpson and H. W. Yates.

Dr. E. D. Tichenor was recently elected a member of the Detroit Athletic Club.

At a recent meeting, the Michigan Squash Racquets Association re-elected Dr. H. N. Torrey of Detroit, president.

The fellows of the Detroit Academy of Medicine were entertained at dinner at the Lochmoor Golf Club, Oct. 11, 1921, by Dr. J. W. Vaughan. Following the dinner Dr. Vaughan gave the retiring president's address, "The Trend of Modern Medicine," which was freely discussed. Dr. Guy L. Kiefer was elected president; Dr. Max Ballin, vice president; Dr. A. D. McAlpin, secretary-treasurer, and Doctors W. P. Manton and L. E. Maire, directors.

The Michigan State Board of Registration in Medicine held their fall examination in Lansing Oct. 11, 12, 13, 1921. Sixteen candidates took this examination.

Dr. George LeFevre of Muskegon was re-elected president of the Michigan State Board of Registration in Medicine at its annual meeting held in Lansing, Oct. 12, 1921. Dr. B. D. Harrison of Detroit was re-elected secretary.

The Detroit Surgical Society was entertained Oct. 14, 1921, in Toronto by the surgeons of the Toronto General Hospital and Hospital for Sick Children.

McGill University celebrated Oct. 11-15, 1921, the hundredth anniversary of its founding. The library of Sir William Osler was formally accepted at this time. Doctors Duncan Cameron of Alpena, A. D. Holmes of Detroit, Hedley Williamson of Detroit and Harry Boulter of Detroit were among those present.

The state supreme court of Indiana has declared the sterilization law unconstitutional. The principal point taken is that the statutes do not give the person concerned a hearing before a judicial body where he may present his side of the case and evidence. The question was also raised as to sterilization being an extra punishment not ordered by a court.

The Albany Medical College has succeeded in raising \$120,000—\$40,000 a year for three years—which was necessary to secure a gift of \$60,000 (\$20,000 a year for three years) from the Rockefeller Foundation.

The General Education Board and the Carnegie Corporation have jointly promised \$100,000 to the Medical College of the University of Georgia, to be paid at the rate of \$20,000 a year for the next five years, on condition that a like amount each year is

raised by the college authorities from other sources. A campaign to obtain the additional funds has been started by the Medical School.

Actual construction on the \$225,000 wing of the Oregon University Medical School has begun and the new building will be ready for the opening of the school year in the fall of 1922 and will more than double the present capacity of the school. The building has been made possible by a gift from the Rockefeller Foundation fund, matched by a state appropriation. In addition the Rockefeller Foundation has donated \$50,000 for the equipment.

The Tri-State District Medical Society will hold its annual assembly in Milwaukee, Nov. 14-17, 1921. Besides papers and addresses by well known physicians and surgeons of Canada and United States, diagnostic clinics will be given.

The American Gynecological Society at its forty-sixth annual meeting June 2-4, 1921, took the following action regarding the bill for the protection of mothers and infants (Sheppard-Towar bill):

1—This society is in thorough accord with the end which this bill seeks to obtain, namely, the protection of the health of mother and infant.

2—It indorses the co-ordination of all health activities under one head.

3—It opposes in principal the control of health measures by non-medical individuals or boards.

4—It believes in the local control of health activities as distinguished from federal.

5—It approves and indorses the idea of propaganda and investigation from the federal government.

6—It does not indorse the Sheppard-Towar bill in its present form because the bill embodies the questionable plan of subsidizing state health activities.

The house of delegates of the Ohio State Medical Association at its last meeting adopted a firm and definite policy in opposition to the nurse anesthetic and repudiated the survey of the special committee.

Dr. Reuben Peterson of Ann Arbor makes the following statement in the August, 1921, issue of the Ohio Stat Medical Journal: This country is not looking for specialists; they are to be found in every corner. What this country wants is more family doctors, general practioners, call them what you please. It wants them because instinctively the people are crying out for the human side of medicine. Will the medical profession answer this call? If it will, I for one am firmly convinced that the people of this country and the medical profession will be better off.

One hundred and eight members (active) were added to the membership roll of the Wayne County Medical Society in 1920-1921. Eight of these members came in by transfer from other county societies.

This year the Detroit Department of Health has 16 physicians, who serve as half-time medical school inspectors. Four of this group will act as an Immunization Squad, and upon them will develop the entire work of vaccination against smallpox and

immunization against diphtheria. They will follow a schedule from school to school. Nurses will have ready for them the children whose parents have given permission for immunization against these two diseases. The other 12 men will serve as physical examiners. They will be divided into four teams of three men each. A nurse will be assigned to each team. All physical examinations in the schools will be conducted by these men, who will follow a schedule, traveling from school to school. The first task of these teams will be the examination of about 10,000 children, who, it is expected, will be found to be 15 per cent or more under weight. This work will be concluded before Dec. 1. Following this, the teams will again make the circuit of the schools, examining all first grade children and such casuals from other grades as are referred by the nurses. Completing this work by March 15, the teams will again make the circuit, examining all fifth grade children. It is expected that 50,000 children will be reached by these physical examinations during the course of the school year.

The Advisory Council of the State Department of Health at its August meeting declared that malaria which has appeared in Michigan this summer is a disease dangerous to public health. The following regulations for its control were promulgated:

1—Cases must be reported.

2—Patients must be isolated during the hours between sunset and sunrise in a room having all the doors and windows covered by a screen having a mesh not coarser than 12 to linear inch.

Harper Hospital has opened a diagnostic clinic to serve the medical profession. Patients are accepted only when referred by a physician. The average stay of the patient in the hospital is from one to four days. The cost is \$25.00 plus \$3.50 per day for a ward bed.

The Wayne County Medical Society held its opening meeting Sept. 19, 1921, with an attendance of a little over 100. President Harold Wilson read the retiring president's address and reports were given by the various committees.

Dr. F. M. Baker of Grosse Point left Sept. 27, 1921, for his hunting lodge in the Black Hills, South Dakota.

Governor Sproul of Pennsylvania has appointed Dr. John M. Baldy as commissioner of welfare under the authority of the new law which was passed at the last session of the legislature. The law creates a department of welfare under the state government to take over the powers and duties of the old state board of public charities, the lunacy commission, the prison labor board and other related activities. Dr. Baldy has been president of the state board of medical education and licensure since its creation in 1911, and has had much to do with the raising of the standard of medical practice in Pennsylvania and in upbuilding of the hospital system in that state. Dr. Irvin D. Metzger of Pittsburgh has been elected chairman of the state bureau of medical education and licensure to succeed Dr. Baldy.

Dr. F. B. Tibbals gave a talk on "Medico-Legal Defense," Sept. 22, 1921, before the East Side Physicians' Association of Detroit.

While cancer accounts for but 4.7 per cent of the total deaths in Detroit (1920), it is unusually severe

on certain age groups. This disease represents 18 per cent of all deaths among women between 40 and 60, while among men of the same age group, it represents 9 per cent of all deaths.

A son, Robert George, was born to Dr. and Mrs. Howell Begle of Detroit, Sept. 7, 1921.

In Philadelphia, where vaccination is compulsory, there has not been a case of smallpox in a native Philadelphian in the last 15 years.

Candidates at the June state examination in Illinois for physicians' licenses were required to take a second test Aug. 30-31, on account of the sale of questions given at the June examination.

The Anesthetists of the Middle West held an organization meeting in Kansas City, Mo., Oct. 24-28, 1921, in connection with the meetings of the Medical Veterans of the World War, Missouri Valley Medical Association, the Medical Society of the Southwest and the National Anesthesia Research Society.

There were 10 deaths among the membership of the Wayne County Medical Society during 1920-1921.

There are about 600 physicians in Wayne County who are eligible, but are not members of the County Society. A membership campaign is to be inaugurated in the near future.

Dr. D. M. Greene, who was legislated out of office as chairman of the Highland Park Hospital Board of Trustees by the city council Sept. 12, 1921, has resigned as chief of the surgical staff. The doctor gives the following reason for his resignation: "Your action in making the hospital an open institution invites and makes possible a class of surgical work by the unskilled for which I do not care to stand responsible."

The Florence Crittenden Home, the Protestant Orphan Asylum, the Home of the Friendless, the Michigan Hospital School and the Thompson Home for Old Ladies were each left \$5,000 by the late Cromwell D. Montrose of Detroit.

The Detroit Board of Education has opened an "Open Window Room" in each of five public schools in addition to the "Open Air Schools." The children in the Open Air Schools have all been definitely diagnosed as being infected by the tubercle bacillus (no open lesions) or as having been exposed to an open case of tuberculosis at home. Admission to the Open Window Room is open to the following: (1) Those convalescing from an acute infectious disease; (2) those who are markedly under weight; (3) those who are suffering from heart disease and who are not eligible for hospitalization; (4) those suffering from a non-tubercular lung infection.

The children of Polish, German and Russian ancestry in the Detroit Public Schools, were found to be the best nourished. The reason for this may be that they receive the more common foods, high in caloric value, instead of rich pastries, etc., and also to the fact that they did not consume as many sweets between meals.

During the year 1920-1921 the Detroit Department of Health excluded 12,803 children from the Detroit

schools on account of disease. They recommended 44,860 corrections for physical defects and secured corrections for 9,983 of these.

Dr. Morton Gallagher of Bay City has recovered after a serious illness of several months.

Dr. George Richards of Bay City recently lost his wife following a short illness.

The Bay City Detention Hospital, city owned, has been re-equipped and opened as a general hospital and is now known as the "Bay City General Hospital." It has a bed capacity of 35 and is a worthy addition to local hospital facilities.

The first regular meeting of the fall of the West Side Physicians' Association was held in the auditorium of the Northwestern High School, Detroit, Oct. 13, 1921. Dr. J. B. Kennedy spoke on the "Progress of Scientific Medicine for the Past Few Centuries." Senator Condon also spoke, urging the medical profession to take more interest in legislative affairs affecting their interests.

The Detroit Academy of Medicine met Oct. 25, 1921, in the office of Dr. A. P. Biddle. Dr. W. H. MacCracken read his inaugural paper on "Some Observations in the Development of Arsenic Tolerance in the Lower Animals."

Dr. John Migdalski, a Hamtramck physician, for whom a manslaughter warrant was issued Oct. 20, 1921, following the death of Mrs. Helen Tinck, pleaded not guilty before Judge S. A. Majewski Oct. 21, 1921. Bail was fixed at \$10,000 with two sureties.

The second directed verdict of guilty in connection with cases of chiropractors in Pontiac was made Oct. 20, 1921, by Judge Glenn C. Gillespie. W. H. Currier had been on trial for practicing medicine without being registered with the Michigan State Medical Board.

The membership Committee of the Wayne County Medical Society announces that at the end of the membership campaign there will be but three classes of physicians on the outside: (1) Those who, because of shady practices, are ineligible; (2) those who are disgruntled and prefer to stay on the outside and knock; (3) those who, because of age or ill health, are no longer in active practice.

Oct. 19, 16 X-ray men of Detroit and vicinity were the guests of Dr. P. M. Hickey at a luncheon given at the Wayne County Medical Society building, where the advisability of organizing a local Roentgen ray and radium society was favorably discussed. The sentiment in favor of such a movement was unanimous. A provisional constitution and by-laws was discussed clause by clause, and finally adopted. The name of the new society is "The Detroit Roentgen Ray and Radium Society." The officers for the year 1921 and 1922 are: President, Dr. P. M. Hickey; vice president, Dr. R. E. Loucks; secretary-treasurer, Dr. James H. Dempster. The program committee consists of Doctors William Evans and Rollin Stevens. A membership committee consisting of Dr. George C. Chene and Dr. Howard P. Doub was appointed by the president.

The Grace Hospital desires to announce the affiliation with the hospital in the capacity of chief

of the division of neurology and psychiatry of Dr. Irwin H. Neff, formerly first assistant physician, Pontiac, Mich., State Hospital, and for 11 years superintendent of the Foxboro and Norfolk State Hospitals, Massachusetts.

For two years Dr. Neff was associated with the division of neurology of the Johns Hopkins Hospital, out-patient department.

The Grace Hospital is prepared to receive neurological patients for diagnosis and treatment in this department.

Physicians who desire to avail themselves of Dr. Neff's services in the hospital are requested to make arrangements for admission of patients by addressing the superintendent.

Correspondence

PAUPERIZATION OF MEDICINE

Detroit, Oct. 10, 1921.

To the Editor—We hear on all sides the discussion of the question of social medicine, state medicine, or whatever name this new boggy to the medical profession may be designated. This problem is treated like some sinister demon of phantom-like nature, which, hiding in the dark, will inevitably be heard and soon seen or felt in all its terrors. That it will be of grave danger both to the medical profession, as well as to the general public, seems to be the accepted opinion. The profession has even gone as far as to hold protest meetings and appoint committees to combat the evil.

But that is neither here nor there. The trend for a good many years has been for the "pauperization of medicine," and not as is so sweetly expressed, the socialization, and I contend that the latest step, this so-called "state medicine" is but another step in that direction.

Just glance at what the regular practitioner of medicine has to contend with in order to make a livelihood for himself and dependents, as a reward for having devoted the better portion of his life in perfecting himself for his career. The array of competition is astounding. It is to be wondered that he can exist at all. In the first place, state, county, and city departments of health already are practicing medicine to a large degree. In the city of Detroit, the city has the largest Genito-Urinary practice in its territory. It has the largest eye, ear, nose, and throat practice, including operative work, in the city. It has a free maternity hospital and baby clinics; it does first aid and medical treatment in the schools, etc. What is all this? What is the cause and purpose? The primary function of the health department should be in preventive medicine and sanitation. If this includes the removal of tonsils or the taking care of confinement cases, etc., there is no reason why the private physician isn't capable of doing the work instead of socializing it by the city. In the same manner in which the poor and needy get city checks and allowances for food and clothing and go to their own private clothier or grocer, so in like manner should the patient be enabled to choose his own family physician or the specialist as required. Not only does the city practitioner have to compete with an already organized and functioning state, county, and city medical practice, but with many other boards, bureaus and clinics. Nearly all hospitals have so-called free clinics, and while the majority of cases attended are beyond question, deserving and creditable, however, is it not pauperizing the people as well as the profession to dispense free medicine in this manner?

The public should vote certain grants for this class of people, so that the physician should receive compensation for his services, and then the patient would know that he is under no obligation to the doctor or to the hospital. Besides the hospital clinics, the doctor must compete with the so-called welfare and social center clinics, with lodge and fraternal doctors and what not. More recently such hospitals as the Henry Ford and the U. of M. are practicing medicine and surgery with their own staffs in open competition to the entire medical profession; the first, a private institution doing no free work, and the second, a state institution taking pay cases.

It is my contention that the medical profession should get at the root of this evil, this attempted pauperization of medicine. No such a problem or boggy, such as "state medicine," would ever be seen or heard of, had not the people been fed up on free medicine, free dispensaries, free clinics, etc. What other profession is so crowded with its "free offerings" on the altar of public service?

"Give a person a finger and he wants the entire hand," said the old philosophers. This applies with equal force to medicine as it would to law, engineering or merchandise.

It is about time that the profession took cognizance of the fact that the so-called "state medicine" is merely the spires and steeples of the structure that has been reared on a foundation more subtle and insidious, namely, "free medicine." Let us begin at the source of the trouble and the effect will soon disappear.

S. E. BARNETT, M. D.

Editor, Journal, Michigan State Medical Society—Perhaps no other calling, in which men are engaged, is less conscious of its personal interests than that of medicine. In fact it would be not a bad thing to get together and determine what those interests may be.

It is hardly an open question but that its disintegrating influences, if such they may be called, are from within. Without the voluntary service of the doctor, State Medicine can cause no alarm; without his support closed hospitals operated by capitalists cannot exist. While the medical profession is awakening to its consciousness as a body of men with common interests, the laity continue to misconstrue its altruism. Among the most recent attempts towards helping the layman and incidentally the general practitioner is the movement on the part of Harper Hospital, Detroit, to make a complete diagnostic examination for a stated sum. Several members of the staff said the first intimation they had was the ad in the Wayne County Medical Bulletin. Hence the idea of a pay diagnostic clinic must have originated elsewhere. The avowed purpose is service to the medical profession. In reality, whom does it serve? Instead of serving the medical profession, what it really does is to tend to destroy the doctor's initiative and lessen his medical acumen. We learn the art of diagnosis by actually performing the necessary acts in connection with it and by profiting by our shortcomings. If we are to have a ready made diagnosis so that nothing is left but to treat the patient what is going to be the outcome so far as developing the diagnostic ability of the profession is concerned? Not only would such a movement lead to the deterioration of scientific medicine in practice, but it would mean the ruination of all consulting practice done by any one outside, who was not a member of the staff of the aforesaid hospital.

For a stated sum all medical and surgical cases may be referred to the hospital and receive the

service of the internist, gastroenterologist, obstetrician, gynecologist, ophthalmologist, laryngologist, dermatologist, neurologist, pathologist, laboratory and x-ray worker. What of those doctors outside, who have endeavored to qualify themselves in these various branches of medicine and are conducting private practice? Is the hospital endeavoring to serve them? Is it even for that matter serving the doctor in general practice? The doctor can be helped best by leaving him free to pursue his work in his own way. The rule of laissez faire is his best servant. It has been very aptly stated that to prove or demonstrate the fallacy of a piece of legislation is not to violate the law, but to carry it out to the letter. If a large portion of the profession, that is, those who, perhaps, limit their work least, made use of such a diagnostic clinic, in a large degree, what would become of those who concentrate their time and efforts upon one particular department of medicine? Carried to its logical conclusion would not such a circumstance be in the same category as discriminating class legislation. Doubtless many will look upon such service as an instance of the "Greeks bearing gifts," and the invitation will be more "honored in the breach than in the observance."

The writer does not believe that there is any doctor in Detroit who wishes to be relieved of the burden of doing his own thinking. What he does wish are the various laboratory findings. He does not wish even the laboratory to make his diagnosis for him, but to supply him the data, which will assist in clearing up obscure points in diagnosis. He summons to his aid likewise the consultant in whom he has confidence for a similar purpose.

The idea of the diagnostic clinic is to help the man on small income; no provision is made, however, for the layman with no income. This idea of service to the man of limited means is laudable so far as it goes. And still the writer feels that these cases are being adequately cared for. The spirit of present day medicine is that no one shall be denied medical or surgical service simply because he has not the means to pay for it. There are very few general physicians or consultant physicians, who are not willing to give their service as individuals either entirely free or for a small fee, which would not pauperize the patient. As one speaker at the Wayne County Medical meeting the other evening phrased it, we are going into hysterics over the medical situation. The disaffection of the people at large towards the medical profession is more apparent than real. We do not believe they have a real grievance even so far as finances are concerned. It is possible right here in Detroit to obtain consultation at a very reasonable stipend.

Full and free discussion of the pros and contras of state medicine; diagnostic clinics; the practice of medicine by university hospitals; paternalism in medicine on the part of civic corporations, etc., should at least tend to dismiss fog and clarify the medical atmosphere.

J. H. DEMPSTER.

641 David Whitney Bldg., Detroit, Mich.
Sept. 26, 1921.

Dr. F. C. Warnshuis,
Grand Rapids, Mich.

Sept. 28, 1921.

Dear Doctor—I have been reading the M. S. Medical Journal for the past ten years, and while it has always been a good journal, the past two years have shown a marked improvement, and the character and tone of the journal has been, in my opinion, of much more interest and help to the general practitioner than it formerly was, and I really think,

just between ourselves, your last number, September, is the best all around number you have ever sent out, and I feel it my duty to offer my congratulations to you for the splendid work you are doing in giving us such a real helpful magazine.

I am inclosing a little doggeral poem I sent in to the secretary of our society at the time of our June meeting at St. Joe. If you think it worth while you can print it, otherwise it will make good food for your waste basket. With best wishes for the continued success of The Journal, I remain,

Cordially yours,

N. A. HERRING.

Why I could not attend the meeting of the Berrien County Medical Society, held in St. Joseph, Mich., June 9th, 1921.

N. A. HERRING, M. D.,
Benton Harbor, Mich.

I feel awful disappointed at the way I was knocked out

From attending of the meeting of the "Docs."
I had planned to be there early,
Get a seat without a flurry,
And be ready for the good things passed about.

After eating of the good things set before us,
And delighting at the jokes that floated o'er,
And the Witt-y sayings going,
And the Sower's jokes aflowing,
Till we cannot hold a single morsel more.

Then we'll hear about the meeting at Bay City,
The discoveries Dr. Mitchell holds in store,
Then our friend from "Old St. Joe,"
Dr. Merritt, will let go,
And we'll learn of "Prostate" troubles all galore.

Then from Dr. Sharrer next will come a "Spoke"
Drs. Martin, Tabor and some other folk
Will not let "Gall" troubles balk them,
But will wade right in and stalk them,
And we all will be the wiser ever more.

Sure some other good things will be on the program,
But I haven't told yet why I cannot go,
Sure I'm home with cough and sneezing,
Sometimes hot, and sometimes freezing,
And I'd be a pretty picture at your show.

I do not think my troubles are alarming,
But it makes a fellow feel quite down and blue,
But I know if you were here to diagnose me,
You all would say, Oh, sure, he's got the "Flue."

THE JOURNAL
IS
YOUR FORUM—
WE INVITE YOU
TO UTILIZE
IT FOR THE
EXPRESSION OF
YOUR VIEWS
ON
MEDICAL SUBJECTS